United States Army Corps of Engineers

SIERRA VISTA SPECIFIC PLAN

Final Environmental Impact Statement

SPK - 2006-01050







U.S. Army Corps of Engineers Sacramento District 1325 J Street Sacramento, CA 95814-2922 (916) 557-6605

Final Environmental Impact Statement Sierra Vista Specific Plan

USACE Action ID: SPK-2006-01050

Prepared for:

U.S. Army Corps of Engineers Sacramento District 1325 J Street Sacramento, California 95814

Prepared by:

Impact Sciences, Inc. 555 12th Street, Suite 1650 Oakland, California 94607

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- C Alternative 4 Water Supply Pipeline Impact Analysis
- ? Section 404(b)(1) Alternatives Analysis for the Sierra Vista Specific Plan Army Corps Permit Application No. SPK-2006-01050 and Appendices

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ACRONYMS AND ABBREVIATIONS

AICP American Institute of Certified Planners

ARB Air Resources Board BO Biological Opinion

CAAQS California Ambient Air Quality Standards

CAPCOA California Air Pollution Control Officer's Association

CDFW California Department of Fish and Wildlife CEQA California Environmental Quality Act

CIP Capital Improvement Program COE Carbon Dioxide Equivalent

CVRWQCB Central Valley Regional Water Quality Control Board

CWA Clean Water Act

DA Department of the Army

DEIS Draft Environmental Impact Statement

EIR Environmental Impact Report
EIS Environmental Impact Statement
FEIS Final Environmental Impact Statement

GHG Greenhouse Gases

LAFCO Local Agency Formation Commission

LEDPA Least Environmentally Damaging Practicable Alternative

LID Low Impact Development MGD Million Gallons per Day

MOU Memorandum of Understanding

MTP/SCS Metropolitan Transportation Plan and Sustainable Communities Strategy

NAAQS National Ambient Air Quality Standards NEPA National Environmental Policy Act

PCAPCD Placer County Air Pollution Control District
PCTPA Placer County Transportation Planning Agency

PCWA Placer County Water Agency PG&E Pacific Gas and Electric

REO Regional Environmental Officer

ROD Record of Understanding

SACOG Sacramento Council of Governments

SIP State Implementation Plan

SOI Sphere of Influence

SVAB Sacramento Valley Air Basin SVSP Sierra Vista Specific Plan

USACE United States Army Corps of Engineers

USEPA United States Environmental Protection Agency

USFWS United States Fish and Wildlife Service VELB Valley Elderberry Longhorn Beetle

VMT Vehicle Miles Traveled

WAPA Western Area Power Administration

WPWMA Western Placer Waste Management Authority

WRSP West Roseville Specific Plan WWTP Wastewater Treatment Plant The Final Environmental Impact Statement (Final EIS) has been prepared to respond to comments received on the Draft EIS for the Sierra Vista Specific Plan Project. The Final EIS has been prepared by the U.S. Army Corps of Engineers (USACE), Sacramento District in accordance with the requirements of the National Environmental Policy Act (NEPA). The USACE is the lead agency under NEPA.

On July 6, 2012, the USACE released the Draft EIS for public review and comment. The comment period closed on August 20, 2012. The Draft EIS evaluated the potential environmental effects of the Proposed Action and five alternatives, including the No Action Alternative, three on-site alternative development plans, and the Southwest Site Alternative. Written comments were received from federal, state, and local agencies, as well as from organizations and individuals. The USACE considered the comments received on the Draft EIS.

The Final EIS consists of the entire Draft EIS, and the comments, responses to comments, and revisions to the Draft EIS.

1.1 PURPOSE AND INTENDED USES OF THE FINAL EIS

NEPA requires a lead agency that has completed a Draft EIS to consult with and obtain comments from public agencies (cooperating, responsible, and/or trustee agencies) that have legal jurisdiction with respect to the proposed action, and to provide the general public with opportunities to comment on the Draft EIS. The Final EIS is a mechanism for responding to these comments. This Final EIS has been prepared to respond to comments received from agencies, organizations, and members of the public on the Draft EIS for the Sierra Vista Specific Plan Project, which are reproduced in this document; and to present corrections, revisions, and other clarifications and amplifications to the Draft EIS made in response to these comments.

As described in the Draft EIS, development on the project site would require the filling of wetlands and other jurisdictional waters of the United States as defined by the Clean Water Act (CWA). This discharge of fill material requires approval from the USACE pursuant to Section 404 of the federal CWA, under which the USACE issues or denies DA permits for activities involving a discharge of dredged or fill materials into the waters of the United States, including wetlands. The Applicants have submitted a total of 11 Section 404 permit applications in support of the SVSP Project. Ten applications cover development on the 10 properties that make up the SVSP site and one application covers the construction of the proposed infrastructure needed to support the development of the proposed mixed-use community. If the USACE approves the 10 individual permits and a Regional General Permit for the infrastructure improvements, the Applicants would be allowed to fill approximately 24.81 acres (10.04 hectares) of wetlands and other jurisdictional waters of the United States, and development of urban uses in the area would be a reasonably foreseeable outcome of the approvals. A Draft RGP is included in Appendix A. The Draft EIS and this Final EIS will be used to support the USACE's decision whether to issue permits pursuant to Section 404 of the Clean Water Act and issue a record of decision (ROD).

1.2 PROPOSED ACTION

The Proposed Action would implement the Sierra Vista Specific Plan (SVSP), which is a proposed specific plan project that includes development of a 1,612-acre (652-hectare) site with a mix of land uses, predominantly residential use with commercial and office uses; public and quasi-public uses; parks and open space; and the infrastructure improvements to support these uses. The project site is located northwest of the intersection of Fiddyment Road and Baseline Road in the western portion of the City of Roseville. The project site is made up of 10 properties¹ controlled by the following six entities: CGB Investments; D.F. Properties, Inc.; Mourier Investment, LLC (MILLC); Baseline P&R, LLC; Baybrook LP.; and Westpark Associates.

The project site is characterized by gently rolling topography and large, open annual grassland areas. The site's natural features include Curry Creek, which flows in a westerly direction and traverses the southeastern and the southwestern portions of the site; a small seasonal swale (locally known as Federico Creek), which flows through the northern portion of the site and joins Curry Creek near Watt Avenue; and an unnamed tributary to Curry Creek that also flows west across the northern portion of the project site. Seasonal wetlands, including vernal pools, are scattered throughout the site. Approximately 90 trees are present on the site with the majority of these occurring in a eucalyptus stand and along Curry Creek.

Features of the human environment present on the site include four large-lot single-family residences; small structures associated with ongoing dry farming agricultural activities (grazing); dirt roads and fencing; two areas along Baseline Road where strawberry fields and a fruit stand are present; and transmission lines. A 375-foot-wide (144-meter-wide) easement that contains multiple transmission lines extends in an east-west direction through the northern portion of the site. The easement is owned by the Western Area Power Administration (WAPA) and Sacramento Municipal Utility District. In addition, there is a 50-foot-wide (15-meter-wide) electrical easement that extends in a north-south direction through a portion of the site.

1.3 PROJECT BACKGROUND

In 2004, the City annexed the West Roseville Specific Plan (WRSP) Area immediately north of the project site. At that time the boundary of the City's Sphere of Influence (SOI) was adjusted to align with that of the 5,500-acre (2,226-hectare) "Transition Area" between the City and Placer County. The Transition Area identified an area that was likely to develop in the future given its proximity to existing services and infrastructure, which had been defined in 1997 to foster cooperative land use planning under the terms of a Memorandum of Understanding (MOU) between the City and County. The majority of the SVSP site is located within this MOU area.

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At the time that the Draft EIS was published, the project site comprised nine properties controlled by six entities. Since then, one of the properties has been subdivided into two properties with Mourier Investment, LLC (MILLC) owning the southern half of the property and Westpark Associates owning the northern half of the property. Therefore the project site now comprises 10 properties controlled by the same six entities listed above.

Sacramento Area Council of Governments '(SACOG's) Preferred Blueprint Scenario, adopted in December 2004 to promote compact mixed-use development and increased use of transit as an alternative to low-density "sprawl," also identified the project site as appropriate to accommodate growth. In this context, the City envisions the SVSP, as completing the unfinished comprehensive planning process for the project site, in order to "implement a large-scale, mixed-use, mixed-density master planned community in the City consistent with the City's General Plan and Growth Management Guiding Principles related to new development west of Roseville and the City's Blueprint Implementation Strategies."²

In May 2010, the City of Roseville and certified an Environmental Impact Report (EIR) for the proposed project and approved the Sierra Vista Specific Plan. The EIR was also the basis for Placer County Local Agency Formation Commission (LAFCO) to approve the annexation of the entire SVSP site in January 2012. The entire SVSP site is now within the Roseville City limits.

1.4 PROJECT PURPOSE AND NEED

The USACE has determined that the project purpose for the Proposed Action is to implement a largescale, mixed-use, mixed-density master-planned community in western Placer County.

The Proposed Action is defined in the statement of project purpose as a large-scale community in western Placer County. Western Placer County is generally defined as the portion of Placer County west of Interstate 80 (I-80) and Highway 65.

For purposes of this EIS, the Proposed Action is defined as a "large scale" master-planned community project because it would develop approximately 1,612 acres (652 hectares) of land. Based on a review of the history of land development proposals in Placer County between 1990 and 2011, a large-scale development project is typically one comprising at least 1,000 acres (405 hectares) of land development.

The Proposed Action is defined as a "mixed-use" community as it comprises not only residential but also commercial uses, public and quasi-public uses, parks, and open space. The residential component of the project is proposed to help meet the foreseeable regional housing demand based on Sacramento Area Council of Government's (SACOG's) projections that the region will add approximately 2 million people by 2050.³

The Proposed Action is defined as a "mixed-density" community because a range of housing types and residential densities are proposed in order to serve the diverse housing needs of the region.

Commercial uses are an element of the mixed-use community. The commercial component is proposed because the commercial land uses would ensure that the local jurisdiction will collect sufficient tax revenue from the proposed community to provide necessary public services. A large-scale residentialonly development would not be fiscally sustainable because the tax revenue from property taxes alone

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² City of Roseville. 2010. Sierra Vista Specific Plan. Adopted May 5.

According to the Metropolitan Transportation Plan and Sustainable Communities Strategy 2035 adopted by SACOG in April 2012, the region is now projected to grow to 871,000 persons by 2035.

would be insufficient to provide the needed City or County services. The types of commercial uses included in the Proposed Action range from neighborhood commercial uses such as grocery stores to community commercial uses, including "power centers." ⁴ Under the Proposed Action, up to two power centers would be developed, in addition to neighborhood-serving retail (grocery stores, drug stores, etc.) and business professional commercial uses. In order for the proposed mixed-use community to be fiscally sustainable, conservatively it is assumed for this EIS that at least one power center needs to be included in the development plan.

The mix of land uses and the densities and intensities of the SVSP are also consistent with SACOG's "Preferred Blueprint Scenario," which advocates densities and intensities higher than those traditionally seen in the Sacramento Region as a means of reducing the severity of long-term environmental impacts. By making a more efficient use of land and facilitating pedestrian travel, bicycle use, and transit use, the combination of mixed uses and more compact development patterns would likely reduce per capita resource consumption (e.g., land, water, electricity, vehicle fuel, energy) and per capita pollution generation (e.g., traditional air pollutants and greenhouse gases).

1.5 AGENCY ROLES AND RESPONSIBILITIES

The USACE is serving as the lead agency for NEPA compliance.

The following agencies and entities also have discretionary authority or legal jurisdiction over part or all of the Proposed Action, or special expertise relevant to the Proposed Action.

- US Environmental Protection Agency
- US Fish and Wildlife Service
- California Department of Transportation
- California Department of Fish and Wildlife⁵
- Central Valley Regional Water Quality Control Board
- City of Roseville

On May 27, 2008, the USACE requested the US Environmental Protection Agency (USEPA) and US Fish and Wildlife Service (USFWS) cooperate in the preparation of the EIS because of their expertise with regard to aquatic resources and Endangered species, respectively. The USEPA declined the role of cooperating agency on June 19, 2008. The USACE reiterated its request for cooperating agencies to both USEPA and USFWS on October 5, 2009, and USEPA again declined on March 18, 2010. The USFWS did not respond to the USACE request. Although the agencies did not cooperate formally under NEPA, both the USEPA and USFWS provided input during preparation of the Draft EIS.

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A power center is defined as a commercial/shopping center dominated by several large anchors, including discount department stores, off-price stores, warehouse clubs, or "category killers," i.e., stores that offer tremendous selection in a particular merchandise category at low prices (ICSC 1999). A power center typically occupies at least 50 acres although some centers can be twice that size.

As of January 1, 2013, the California Department of Fish and Game was renamed the California Department of Fish and Wildlife.

When making decisions on the Proposed Action, state agencies including the California Department of Transportation, the California Department of Fish and Wildlife (CDFW), the Central Valley Regional Water Quality Control Board (CVRWQCB), and the City of Roseville can also rely on the EIR certified by the Roseville City Council in May 2010 rather than on this EIS.

1.6 SUMMARY DESCRIPTION OF PROJECT ALTERNATIVES

As discussed earlier in the chapter, based on their ability to meet the purpose and need of the Proposed Action and their feasibility as determined by the application of screening criteria, three on-site alternatives and one off-site alternative were determined to be reasonable alternatives to the Proposed Action and were carried forward in the Draft EIS for detailed evaluation along with the No Action Alternative. These alternatives are briefly described below.

1.6.1 Alternative 1: Reduced Footprint/Increased Density Alternative

This on-site alternative would develop the 1,612-acre (652-hectare) project site, but would reduce the footprint of development within the site by increasing the acreage designated as open space, with the additional open space focused in areas that contain the greatest concentrations of sensitive habitat (vernal pools and/or drainages). Under this alternative, total acreage to be developed would be reduced to 1,027 acres (416 hectares), compared to 1,370 acres (554 hectares) under the Proposed Action, and open space would increase to 599 acres (242 hectares), compared to 234 acres (95 hectares) under the Proposed Action. The residential development footprint would decrease to 593 acres (240 hectares), versus 820 acres (332 hectares) under the Proposed Action. However, residential densities would increase to accommodate a similar number of residential units (6,655 dwelling units under this alternative, compared to 6,650 dwelling units under the Proposed Action). Acreage designated for commercial uses would be reduced slightly under this alternative. In addition, although the extent of designated open space would increase, the Citywide park included in the Proposed Action would be eliminated. On- and off-site utility infrastructure required to serve development under Alternative 1 would be similar to infrastructure required to serve development under Alternative 1 would be similar to infrastructure required to serve development under the Proposed Action.

1.6.2 Alternative 2: Reduced Footprint/Same Density Alternative

The Reduced Footprint/Same Density Alternative is also an on-site alternative that would have the same reduced development footprint as Alternative 1 described above, but would develop the site at the same density as the Proposed Action. As a result, this alternative would provide 4,931 dwelling units, compared to 6,650 dwelling units under the Proposed Action. Acreage designated for commercial uses would be reduced slightly under this alternative in comparison with the Proposed Action. In addition, although the extent of designated open space would increase, the Citywide park included in the Proposed Action would be eliminated. On- and off-site utility infrastructure and roadway improvements required to serve development under Alternative 2 would be similar to infrastructure required to serve development under the Proposed Action.

1.6.3 Alternative 3: Focused Avoidance Alternative

Under the Focused Avoidance Alternative, in addition to the areas preserved as open space under the Proposed Action, an additional 248 acres (100 hectares) located primarily in the central and western portions of the site would be preserved. This would reduce the development footprint to 1,150 acres (465 hectares), compared to 1,370 acres (554 hectares) under the Proposed Action. Residential density would not be increased; therefore, total residential development would be reduced to 5,346 dwelling units, compared to 6,650 dwelling units under the Proposed Action. Commercial uses would be reduced by 77 acres (31 hectares) as compared to the Proposed Action. Public/quasi-public uses would largely be the same as under the Proposed Action. On- and off-site utility infrastructure and roadway improvements required to serve development under Alternative 3 would be similar to infrastructure required to serve development under the Proposed Action.

1.6.4 Alternative 4: Southwest Site

This alternative is off-site and would construct the proposed mixed-use community on an approximately 2,389-acre (967-hectare) site located on Baseline Road approximately 2 miles (3.2 kilometers) to the west of the project site. The Southwest site is bounded by the extension of Sankey Road and the County-approved Regional University and Community SP Area to the north, the Sutter County line to the west, the Country Acres rural residential area and Baseline Road to the south, and the Curry Creek Community Plan (CP) area to the east. This site has not previously been proposed for development. Under this alternative, the site would be developed with about 875 acres (354 hectares) of residential uses (5,595 dwelling units at buildout), 138 acres (54 hectares) of commercial and office uses, 75 acres (30 hectares) of public and quasi-public uses, 90 acres (36 hectares) of parks, and 22 acres (9 hectares) of paseos. About 953 acres (386 hectares) would be preserved as open space.

Off-site utility improvements required to served development under Alternative 4 include water, sewer, and recycled water pipelines. A sewer force main would be constructed from a sewer pump station on the alternative site in a northerly and then easterly direction to the Pleasant Grove Wastewater Treatment Plant (WWTP). Finally, a recycled water line would be constructed from the Pleasant Grove WWTP to the alternative site along the same alignment as the sewer main. To serve the early phases of development on the Alternative 4 site, a water main connecting to the City of Roseville water distribution system would be constructed from the intersection of Fiddyment Road and Baseline Road west along Baseline Road to the alternative site, then north along Brewer Road through the site, and then in an easterly direction to a location 0.5 mile northwest of the Pleasant Grove WWTP. To serve the buildout, additional water would be supplied to the site from the Ophir water treatment plant that has been approved for construction by Placer County Water Agency (PCWA). Water from this plant would be conveyed to the vicinity of Alternative 4 site via a new pipeline that would extend from the Ophir plant through the City of Rocklin and north of the City of Roseville where it would then turn south down Watt Avenue along the western boundary of Roseville to Baseline Road. The pipeline would be constructed by the PCWA.

1.6.5 Alternative 5: No Action Alternative

Under the No Action Alternative the project site would be developed in a manner that avoids activities in jurisdictional waters of the United States, including wetlands, and thereby avoids the need for USACE approvals under Section 404 of the Clean Water Act. However, local approvals from the City and state agencies would still be required. The No Action Alternative may also require authorization from the USFWS under the federal Endangered Species Act because of the potential for take of federally listed species.

The No Action Alternative would involve development of portions of the approximately 1,612-acre (652-hectare) SVSP site, resulting in a reduced extent of residential and commercial uses. Avoidance of Section 404 triggers would reduce the total development footprint to 771 acres (312 hectares), comprising 489 acres (198 hectares) of residential uses (3,729 dwelling units at buildout), 147 acres (59 hectares) of commercial and office uses, 58 acres (23 hectares) of public and quasi-public uses, 68 acres (28 hectares) of parks, and 9 acres (4 hectares) of paseos. About 755 acres (306 hectares) would be preserved as open space. On- and off-site utility infrastructure required to serve development under the No Action Alternative would be similar to infrastructure required to serve development under the Proposed Action.

The analysis of the No Action Alternative assumes that while the project site would develop in the manner described above, the project region would develop consistent with the local general plans.

1.7 NEPA REQUIREMENTS FOR RESPONDING TO COMMENTS

NEPA requires the Final EIS to include and respond to all substantive comments received on the Draft EIS (40 CFR Section 1503.4). Lead agency responses may include the need to:

- modify the proposed action or alternatives
- develop and evaluate new alternatives
- supplement, improve, or modify the substantive environmental analyses
- make factual corrections to the text, tables, or figures contained in the Draft EIS
- explain why no further response is necessary

Additionally, the Final EIS must discuss any responsible opposing view that was not adequately discussed in the Draft EIS and must indicate the lead agency's response to the issue raised.

1.8 REQUIREMENTS FOR DOCUMENT CERTIFICATION AND FUTURE STEPS IN PROJECT APPROVAL

The Final EIS is being distributed to agencies, stakeholder organizations, and individuals who commented on the Draft EIS. The Final EIS will be available for public review for 30 days after a notice is published in the Federal Register. Comments shall be sent to:

US Army Corps of Engineers, Sacramento District Regulatory Division Attn: Kathy Norton 1325 J Street, Room 1480 Sacramento, California 95814-2922

Fax: (916) 557-6877

Email: DLL-CESPK-RD-EIS-Comments@usace.army.mil

USACE will circulate the Final EIS for a minimum of 30 days before taking action on the permit applications and issuing its ROD. The ROD will address the decision, alternatives considered, the environmentally superior alternative, relevant factors considered in the decision, and mitigation and monitoring.

1.9 ORGANIZATION AND FORMAT OF THE FINAL EIS

This Final EIS has been organized in the following manner:

- Chapter 1.0, Introduction describes the purpose and content of the Final EIS.
- Chapter 2.0, Comments on the Draft EIS and Responses to Comments contains a list of all agencies and persons who submitted comments on the Draft EIS during the public review period, copies of the comment letters submitted on the Draft EIS, and individual responses to the comments.
- Chapter 3.0, Errata presents corrections and revisions to the text of the Draft EIS based on
 issues raised by comments, clarifications, corrections, or minor changes to the Proposed Action.
 Changes in the text are shown by strikeouts where text is removed and by <u>underline</u> where text is
 added.
- Chapter 4.0, References lists the references cited in the above chapters.
- Chapter 5.0, List of Preparers identifies the USACE and consultant staff involved in the preparation of this Final EIS.

1.10 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table 1.0-1 below presents a summary of the environmental effects of the Proposed Action and alternatives, and for effects determined to be significant, it also presents feasible mitigation measures that would avoid or reduce the significant effects.

Table 1.0-1 Summary of Impacts and Mitigation Measures

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Aesthetics						
Impact AES-1: Effect on Scenic Vistas	SU	SU	SU	SU	SU	SU
PA, NA, A1, A2, A3, A4						
No mitigation is feasible.						
Impact AES-2: Effect on Scenic Resources	LTS	LTS	LTS	LTS	LTS	LTS
impact ALS-2. Effect on Scenic Resources	LIS	EIS	LIS	LIS	LIS	LIS
BA NA 41 A2 A2 A4						
PA, NA, A1, A2, A3, A4						
No mitigation is required.						
Impact AES-3: Degradation of Visual	SU	SU	SU	SU	SU	SU
Character						
PA, NA, A1, A2, A3, A4						
No mitigation is feasible.						

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact AES-4: Effects from New Sources of Light and Glare	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)

Mitigation Measure AES-4a

Site Lighting to Minimize Nuisance

(Applicability – Proposed Action and All Alternatives)

Light-producing uses, such as ball fields, within the SVSP Area shall be located and oriented to minimize visual impacts on adjacent residential areas. Lighting shall be shielded and designed to distribute light in the most effective and efficient manner, using the minimum amount of light to achieve the necessary illumination for the use, as defined by suggested lighting standards for competitive play.

Mitigation Measure AES-4b

Disclosure Requirements

(Applicability – Proposed Action and All Alternatives)

The developers shall be required to disclose to all adjacent residential areas (as shown as KT-1 and KT-40 on the Land Use Plan), through a deed disclosure or other similar notice approved by the City Attorney, that a Citywide park is proposed that will contain outdoor lighting and noise from recreation activities.

Mitigation Measure AES-4c

Use of Low Glare Materials for New Development

(Applicability – Proposed Action and All Alternatives)

In order to reduce the effects of daytime glare from development of commercial or office uses within the SVSP Area, building developers should make use, when feasible, of low-glare materials.

Mitigation Measure AES-4d

Avoid Light Spill Over into Curry Creek and Open Space Areas

 $(Applicability-Proposed\ Action\ and\ All\ Alternatives)$

Outdoor lighting shall be placed, designed, and directed so as to avoid light spillover into the habitat of Curry Creek and the Open Space Preserve areas located immediately adjacent to the open space, as shown on the Land Use Map as parcels KT-1, KT-40, KT-30, KT-41, DF-1, DF-2, DF-40, CG-1, CG-82, JM-21, JM-3, and JM-4.

Timing: Before approval of building permits for all phases

Enforcement: City of Roseville Planning and Public Works Departments (PA, NA, A1 through A3); Placer County Planning and Public Works Departments (A4)

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Agricultural Resources						
Impact AG-1: Conversion of Agricultural Land	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)	SU(m)

Mitigation Measure AG-1

Agricultural Compensation

(Applicability – Proposed Action and All Alternatives)

One acre of open space will be preserved within Placer County for each acre of open space impacted within the Specific Plan area. This is to be accomplished through the recordation of conservation easements that result in the formation of preserve lands (each a "mitigation property or "preserve site" and collectively, "mitigation lands" or "preserve lands"). For the purposes of assessing impacts associated with a specific development project, "open space" impacts shall include all land proposed to be developed for urban uses. For purposes of mitigation for the specific development project, the term "open space" shall include any and all undeveloped land proposed to be preserved by conservation easement or otherwise required by any governmental agency to be preserved for any reason, specifically including all lands preserved for habitat or agricultural mitigation as set forth below and lands in agricultural use. No additional agricultural mitigation is required beyond the 1:1 open space requirement noted above, as long as a substantial portion, as determined by the Planning Director, of the mitigation lands acquired are: (1) in agricultural production, (2) are undeveloped and have an NRCS soils classification of the same or greater value than lands being affected within the Specific Plan property at issue, or (3) are undeveloped and have the same or higher value CDC categorization as lands being affected within the Specific Plan property at issue.

Timing: Before approval of final maps

Enforcement: City of Roseville Planning Department (PA, NA, A1 through A3); Placer County Planning Department (A4)

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact AG-2: Compatibility with Adjacent	LTS(am)	LTS(am)	LTS(am)	LTS(am)	LTS(am)	LTS(m)
Agricultural Uses						

Mitigation Measure AG-2

Deed Disclosure regarding Agricultural Uses

(Applicability – Proposed Action and All Alternatives)

In order to reduce potential conflicts between sensitive uses and agricultural uses, residential units within 100-feet of undeveloped parcels to the west of the SVSP area where agricultural uses exist shall be provided with a deed disclosure or similar notice approved by the City Attorney regarding the proximity and nature of neighboring potential agricultural uses. This disclosure shall be applied at the tentative map state to the affected properties. A written disclosure shall be supplied to the property purchaser or renter by the vendor prior to the completion of the purchase or rental agreement, until such time that the uses are converted to urban development. The text of the disclosure language shall be approved by the City Attorney.

Timing: Before approval of final maps

Enforcement: City of Roseville Planning Department (PA, NA, A1 through A3); Placer County Planning Department (A4)

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Air Quality						
Impact AQ-1: Emissions Associated with Construction	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)

Mitigation Measure AQ-1

Dust and Construction Control Measures

(Applicability – Proposed Action and All Alternatives)

In accordance with the Placer County Air Pollution Control District (PCAPCD), the Applicant shall comply with all applicable rules and regulations as listed above (e.g., Rule 202, 218 and 228). In addition, prior to the approval of a discretionary permit, the applicant(s) shall implement the following measures unless superseded by state or other more stringent standards:

The following mitigation measures shall be implemented to reduce short-term construction-related air quality impacts. In addition, dust control measures are required to be implemented by all projects in accordance with the City of Roseville Grading Ordinance, and the PCAPCD Fugitive Dust Rule 228.

- Applicant shall submit to PCAPCD a Construction Emission/Dust Control Plan within 30 days prior to groundbreaking. The applicant shall provide evidence that a plan was submitted to PCAPCD to the City. If the PCAPCD does not respond within 20 days, the plan shall be considered approved. The plan must address the minimum requirements found in section 300 and 400 of District Rule 228, Fugitive Dust (www.placer.ca.gov/airpollution/airpolut.htm). The applicant shall keep a hard or electronic copy of Rule 228, Fugitive Dust on site for reference.
- The Construction Emission/Dust Control Plan shall include a comprehensive inventory (i.e. make, model, year, emission rating) of all heavy-duty off-road equipment (50 horsepower (HP) of greater) that will be used an aggregate of 40 or more hours for the construction project. The project representative shall provide PCAPCD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. The plan shall demonstrate that the heavy-duty (> 50 HP) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction compared to the most recent ARB fleet average. PCAPCD shall be contacted for average fleet emission data. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. Contractors can access the Sacramento Metropolitan Air Quality Management District's web site to determine if their off-road fleet meets the requirements listed in this measure.

 (http://www.airquality.org/ceqa/Construction_Mitigation_Calculator.xls)

The following measures are also included to reduce construction-related ROG, NOx, PM10 and PM2.5 emissions:

• All construction equipment shall be maintained in good operating condition. Contractor shall ensure that all construction equipment is being properly serviced and maintained as per the manufacturer's specifications. Maintenance records shall be available at the construction site for verification. This measure will reduce combustion emissions of all criteria air pollutants.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)

- Prior to the issuance of any grading permits, all applicants shall submit construction plans denoting the proposed schedule and projected equipment use. Construction contractors shall provide evidence that low emission mobile construction will be used, or that their use was investigated and found to be infeasible for the project. Low emission equipment is defined as meeting the California Air Resources Board's Tier III standards. Contractors shall also conform to any construction measures imposed by the PCAPCD as well as City Planning Staff. This measure will primarily reduce ROG, NOx, PM10, and PM2.5 exhaust emissions.
- Paints and coating shall be applied either by hand or by high volume, low-pressure spray. This measure will reduce evaporative ROG emissions.
- All construction shall comply with the following measures to reduce fugitive dust related emissions of PM10 and PM2.5:
 - Maintain a minimum 24-inch freeboard on soil haul trucks or cover payloads using tarps or other suitable means.
 - Suspend grading operations during high winds (greater than 15 mph).
 - Sweep streets as necessary if silt is carried off site to adjacent public thoroughfares or occurs as a result of hauling.
 - Dispose of surplus excavated material in accordance with local ordinances and use sound engineering practices.
 - Schedule activities to minimize the amounts of exposed excavated soil during and after the end of work periods.
 - Phase grading into smaller areas to prevent the susceptibility of larger areas to erosion over extended periods of time.
 - Pave or apply gravel to any on-site haul roads.
 - Reestablish ground cover on the construction site through seeding and water.
 - Clean earth moving construction equipment with water or sweep clean, once per day, or as necessary (e.g., when moving on site), consistent with National Pollutant Discharge Elimination System Best Management Practices and the Roseville Grading Ordinance. Water shall be applied to control dust as needed to prevent dust impacts off site. Operational water truck(s), shall be on site, as required, to control fugitive dust.
 Construction vehicles leaving the site shall be cleaned, as needed, to prevent dust, silt, mud, and dirt from being released or tracked off site.
 - Spread soil binders on unpaved roads and employee/equipment parking areas. Soil binders shall be non-toxic in accordance with state and local regulations. Apply approved chemical soil stabilizers, or vegetated mats, etc. according to manufacturers' specifications, to all-inactive construction areas (previously graded areas which remain inactive for 96 hours).
 - Minimize diesel idling time to a maximum of 5 minutes.
 - Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary diesel power generators, if feasible.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)

- An applicant representative, ARB-certified to perform Visible Emissions Evaluations (VEE), shall routinely (i.e., once per week) evaluate project
 related off-road and heavy-duty on-road equipment emissions for compliance with this requirement for projects grading more than 20 acres in size,
 regardless of how many acres are to be disturbed daily.
- Construction equipment exhaust emissions shall not exceed the PCAPCD Visible Emissions Rule 202. Fugitive dust is not to exceed 40 percent opacity and not go beyond property boundary at any time. Operators of vehicles and equipment found to exceed opacity limits are to be immediately notified and the equipment must be repaired within 72 hours.

The City of Roseville is currently working with the Placer County Pollution Control District to update the standard mitigation measures. The following measures will likely be required at the time specific development is proposed.

- 1a. Prior to approval of Grading/plans the applicant shall submit a Construction Emission/Dust Control Plan to the Placer County APCD. The plan must be submitted by certified mail, or receive a date stamp or other submittal proof. This plan must address the minimum Administrative Requirements found in section 300 and 400 of APCD Rule 228, Fugitive Dust. The applicant shall not break ground prior to receiving APCD approval of the Construction Emission/Dust Control Plan. If the applicant has submittal proof of submittal and no response is received from the District within 20 working days the plan shall be deemed complete, and construction may begin.
- 1b. Include the following standard note on the Improvement/Grading Plan: The prime contractor shall submit to the District a comprehensive inventory (i.e. make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower of greater) that will be used an aggregate of 40 or more hours for the construction project. If any new equipment is added after submission of the inventory, the prime contractor shall contact the APCD prior to the new equipment being utilized. At least three business days prior to the use of subject heavy-duty off-road equipment, the project representative shall provide the District with the anticipated construction timeline including start date, and name and phone number of the property owner, project manager, and on-site foreman.
- 1c. Prior to approval of Grading/Improvement Plans, the applicant shall provide a plan to the Placer County APCD for approval by the District demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction compared to the most recent CARB fleet average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.
- 2. Include the following standard note on the Improvement/Grading Plan: If required by the Public Works Department, the contractor shall hold a preconstruction meeting prior to grading activities. The contractor shall invite the Placer County APCD to the pre-construction meeting in order to discuss the construction emission/dust control plan with employees and/or contractors.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)

- 3. Prior to building permit approval, the applicant shall show, on the plans submitted to the Building Department, that electrical outlets shall be installed on the exterior walls of both the front and back of all residences or all commercial buildings to promote the use of electric landscape maintenance equipment.
- 4. Prior to building permit approval, the applicant shall show, on the plans submitted to the Building Department, provisions for construction of new residences, and where natural gas is available, the installation of a gas outlet for use with outdoor cooking appliances, such as a gas barbecue or outdoor recreational fire pits.
- 5. Prior to building permit approval, in accordance with District Rule 225, only US EPA Phase II certified wood burning devices shall be allowed in single-family residences. The emission potential from each residence shall not exceed a cumulative total of 7.5 grams per hour for all devices. Masonry fireplaces shall have either an EPA certified Phase II wood burning device or shall be a U.L. Listed Decorative Gas Appliance. (Rule 225)
- 6. Wood burning or Pellet appliances shall not be permitted in multi-family developments. Only natural gas or propane fired fireplace appliances are permitted. These appliances shall be clearly delineated on the Floor Plans submitted in conjunction with the Building Permit application. (Rule 225/section 302.2)
- 7. Prior to the issuance of a Building Permit, the applicant shall show that all flat roofs with parapets shall include a white or silver cap sheet to reduce energy demands.
- 8. Diesel trucks shall be prohibited from idling more than 5 minutes. Prior to the issuance of a Building Permit, the applicant shall show that all truck loading and unloading docks shall be equipped with one 110/208 volt power outlet for every two dock doors. Diesel Trucks idling for more than 5 minutes shall be required to connect to the 110/208 volt power to run any auxiliary equipment. 2-foot x3-foot signage which indicates "Diesel engine Idling Limited to a Maximum of 5 Minutes" shall be shown on the building elevations and shall be submitted to the Placer County APCD prior to the issuance of Building Permits for the project.
- 9. Prior to approval of Improvement Plans, an enforcement plan shall be established, and submitted to the APCD for review, in order to evaluate project-related on-and-off- road heavy-duty vehicle engine emission opacities on a weekly basis, using standards as defined in California Code of Regulations, Title 13, Sections 2180 2194. An Environmental Coordinator, hired by the prime contractor or property owner, and who is CARB-certified to perform Visible Emissions Evaluations (VEE), shall routinely evaluate project related off-road and heavy duty on-road equipment emissions for compliance with this requirement. Operators of vehicles and equipment found to exceed opacity limits will be notified by APCD and the equipment must be repaired within 72 hours. (California Code of Regulations, Title 13, Sections 2180 2194).

PCAPCD Rules (Existing District requirements to be added as construction notes or referenced in conditions of approval)

New Standard Condition of Approval (for all projects): The project shall comply with all applicable Placer County Air Pollution Control District rules and regulations, and shall obtain applicable permits and/or clearances from the District prior to the start of construction.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)

The following air quality notes shall be added to the grading and/or improvement plans:

- The contractor shall use CARB ultra low sulfur diesel fuel for all diesel—powered equipment. In addition, low sulfur fuel shall be utilized for all stationary equipment. (California Standards for Motor Vehicle Diesel Fuel, title 13, article 4.8, chapter 9, California Code of Regulations).
- Processes that discharge 2 pounds per day or more of air contaminants, as defined by Health and Safety Code Section 39013, to the atmosphere may require a permit. Permits are required for both construction and operation. Developers/contractors should contact the District prior to construction and obtain any necessary permits prior to the issuance of a Building Permit. (Rule 501)
- Pursuant to the Placer County Air Pollution Control District Rule 501, General Permit Requirements, the proposed project may need a permit from the District prior to construction. In general, any engine greater than 50 brake horsepower or any boiler with heat greater than 1,000,000 Btu per hour shall require a permit issued by the District. (Rule 501)
- All on-site stationary equipment which is classified as 50 hp or greater shall either obtain a state issued portable equipment permit or a Placer County APCD issued portable equipment permit. (California Portable Equipment Registration Program, Section 2452).
- The contractor shall utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary diesel power generators if feasible.
- During construction, the contractor shall minimize idling time to a maximum of 5 minutes for all diesel powered equipment.
- During construction, traffic speeds on all unpaved surfaces shall be limited to 15 miles per hour or less. (Rule 228/section 401.2)

Timing: Before the approval of grading plans and throughout project construction, as appropriate for all project phases.

Enforcement: City of Roseville Public Works and Planning Departments (PA, NA, A1 through A3); Placer County Planning and Public Works Departments (A4); Placer County Air Pollution Control District

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact AQ-2: Criteria Pollutant Emissions Associated with Occupancy/Operation	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)

Mitigation Measure AQ-2

Project Measures to Reduce Operational Emissions (Applicability – Proposed Action and All Alternatives)

Following receipt of an application for a Tentative Maps (excluding the large lot subdivision map), Design Review Permit, conditional use permits and/or all discretionary permits, as found to be in compliance with the 30 percent reduction analysis applicable for individual projects with the Specific Plan, the City will forward an early consultation notice to the Placer County Air Pollution Control District (PCAPD). Where the PCAPD provides comments on a specific development proposal, the City shall consult with PCAPD and the developer to incorporate measures recommended by the PCAPD and agreed to by the City into the project. Where the PCAPD does not provide comment on a specific development proposal, the City shall incorporate measures that reduce vehicle emissions and operation emissions from the proposed development. This measure will be implemented through project design, conditions of approval, noticing and disclosure statements, or through the City's plan check and inspection processes. This process is intended to ensure that best available and practical approaches are used to reduce operational emissions in specific tentative map and design review permit applications. The following is a listing of measures that shall be implemented for the purpose of reducing vehicle and operational emissions.

- Provide tree plantings that meet or exceed the requirements of the City's Community Design Guidelines to provide shading of buildings and parking lots.
- Landscape with native drought-resistant plants (ground covers, shrubs and trees) with particular consideration of plantings that are not reliant on gas-powered landscape maintenance equipment.
- Require all flat roofs on non-residential structures to have a white or silver cap sheet to reduce energy demand.
- Provide conductive/inductive electric vehicle charging station and signage prohibiting parking for non-electric vehicles within designated spaces within non-residential developments.
- Provide vanpool parking only spaces and preferential parking for carpools to accommodate carpools and vanpools in employment areas (e.g. community commercial, business-professional uses)
- All truck loading and unloading docks shall be equipped with one 110/208 volt power outlet for every two-dock doors. Signs shall be posted stating
 "Diesel trucks are prohibited from idling more than 5 minutes and trucks requiring auxiliary power shall connect to the 110/208-vot outlets to run
 auxiliary equipment."
- Design streets to maximize pedestrian access to transit stops.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)

- Require site design to maximize access to transit lines, to accommodate bus travel, and to provide lighted shelters at transit access points.
- Develop the plan consistent with the higher residential densities (within approved residential density ranges of zone) provided around the village nodes and transit corridors.
- Include photovoltaic systems in project design and/or participate in Roseville Electric incentive programs for energy-efficient development where feasible.

Measures for Detached Single-Family Residences:

- Require electrical outlets be installed on the exterior walls of both the front and back of residences to promote the use of electric landscape maintenance equipment.
- Require installation of a gas outlet in the rear of residential buildings for use of outdoor cooking appliances, such as gas burning barbeques.
- Require installation of low nitrogen oxide (NOx) hot water heaters (beyond District Rule 246 requirements)
- Provide notice to homebuyers of incentive and rebate programs available through Roseville Electric or other providers that encourage the purchase of electric landscape maintenance equipment.

Prior to approval of Tentative Maps provide notice to homebuyers through CC&Rs or other mechanisms to inform them that only gas fireplaces would be permitted. Where propane or natural gas service is not available, only EPA Phase II certified wood-burning devices shall be allowed in single-family residences. The emission potential from each residence shall not exceed 7.5 grams per hour. Woodburning or Pellet appliances shall not be permitted in multi-family developments.

Timing: Before the approval of grading plans and throughout project construction, as appropriate for all project phases.

Enforcement: City of Roseville Public Works and Planning Departments (PA, NA, A1 through A3); Placer County Planning and Public Works Departments (A4); Placer County Air Pollution Control District

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact AQ-3: CO Hotspots	LTS	LTS	LTS	LTS	LTS	LTS
PA, NA, A1, A2, A3, A4						
No mitigation is required.						
Impact AQ-4: Exposure to Toxic Air Contaminants	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(am)

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Mitigation Measure AQ-4a	Risk Assessment and Site Specific Measures					

(Applicability – Proposed Action and All Alternatives)

Users that could generate toxic air contaminants will be required to submit a Permit to Operate to the PCAPCD. The District will review the use and if a proposed project would cause the combined emissions of TACs to exceed the risk standard of 10 in 1 million at residences or public uses (schools, parks, etc.), additional modeling and/or environmental review would be required to demonstrate emissions from that use or other uses would be reduced so that the standard is not exceeded. For example, an applicant could propose to retrofit an existing operation in order to lower the total TAC emissions in the SVSP area.

Mitigation Measure AQ-4b Screening Health Risk Assessment (Applicability – Proposed Action and On-Site Alternatives)

A screening health risk assessment shall be conducted if the approval or residential uses occurs subsequent to approval of the commercial area within the Placer Vineyard Specific Plan area and that commercial area allows for industrial land uses. If the screening analysis shows potential significant health risks, then a more detailed health risk assessment should be conducted. If significant acute, chronic, or carcinogenic health risks are predicted, then measures shall be identified that reduce all health risks to less than significant levels. Such analysis and mitigation may include:

- Land use and site design requirements including building setbacks and building orientation.
- Consideration of the distance between industrial uses (emissions) and the location of potential sensitive receptors and implementation of setbacks to maximize distance.
- Application of scrubbers or other modifications to industrial uses to further reduce emissions.
- Limitations on outdoor use in non-residential areas used by sensitive receptors.

Timing: Before the approval of grading plans and throughout project construction, as appropriate for all project phases.

Enforcement: City of Roseville Public Works and Planning Departments (PA, NA, A1 through A3); Placer County Planning and Public Works Departments (A4); Placer County Air Pollution Control District

Impact AQ-5: Exposure to Objectionable Odors	NE	NE	NE	NE	NE	NE
PA, NA, A1, A2, A3, A4						
No mitigation is required.						

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Biological Resources						
Impact BIO-1: Loss of Wetlands through Direct Removal, Filling, Hydrological Interruption or Other Means	LTS(m)	NE	LTS(m)	LTS(m)	LTS(m)	LTS(m)
NA No mitigation is required.						
PA, A1, A2, A3, A4 Mitigation described below.						

Wetland Compensatory Mitigation

(Applicability – Proposed Action)

To mitigate for the unavoidable loss of wetlands and other waters of the US, the Applicants will develop and implement a wetlands mitigation plan that will consist of preservation, restoration, and establishment of wetlands on the project site and purchase of vernal pool creation/restoration and preservation credits, and/or provide permittee-responsible preservation and/or restoration at an off-site location. **Table 3.4-9, Proposed Action Wetlands Impacts and Mitigation Area Summary,** presents acres of wetlands that would be affected under the Proposed Action and acres of wetlands that would be created or preserved under the Applicant's proposed conceptual mitigation plan.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)

On-Site Preservation and Restoration

The conceptual mitigation plan proposes preservation of 13.7 acres of wetlands and other waters of the US on the project site in perpetuity and managed to maintain their resource functions and values. These would be preserved within the designated open space on the project site. The open space areas include stream corridors of Curry Creek and Federico Creek and wetlands in close proximity to these streams. Approximately 100-foot buffers would be established along the two corridors to minimize indirect impacts to the preserved wetlands from the Proposed Action.

On-Site Wetlands Creation

The proposed on-site wetlands creation plan for the Proposed Action is shown in **Figure 3.4-8**, **Proposed On-Site Wetlands Creation**. The on-site wetland creation is designed to compensate for impacts to streams, ponds, perennial marsh, seasonal wetland swales, and a portion of the impacts to seasonal wetlands. In addition to providing partial replacement of wetland losses, it is also designed to restore, as much as possible, the function of the preserved streams that have been degraded by historic agricultural practices and upstream development.

According to the conceptual mitigation plan, a total of 28.24 acres of wetlands will be constructed on the project site. The wetlands will be located on low terraces excavated adjacent to the existing stream channels along the inside of stream meanders and along relatively straight reaches so as to avoid being intercepted by the natural meandering of the creek channel.

Off-Site Creation/Restoration and Preservation

According to the conceptual mitigation plan, the Applicants will provide permittee-responsible preservation and/or restoration at an off-site location or secure creation/restoration credits for 7.98 acres of constructed vernal pools and preservation credits for 14.93 acres of vernal pools from an approved mitigation bank in western Placer County within the bank's approved service area.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4	
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)	
Mitigation Measure BIO-1b	Wetland Mitigation Plan						
(Applicability – Alternatives 1 through 4)							

A wetlands mitigation plan similar to the Applicant's proposed mitigation described above for the Proposed Action will be implemented in conjunction with each alternative. The plan will incorporate similar elements, including preservation and creation of wetlands on-site, as well as permittee-responsible preservation and/or restoration at an off-site location or purchase of constructed vernal pool creation/restoration credits and preservation credits by the Applicants. The USACE would require detailed, specific mitigation plans for a given alternative and would evaluate the specifics of this plan to determine the actual mitigation requirement based on a number of factors, including functions, location, change in surface area, uncertainty or risk of failure, and temporal loss of function.

Timing: Before approval of grading or improvement plans or any ground-disturbing activities for any project development phase containing wetland features.

Enforcement: U.S. Army Corps of Engineers, Sacramento District; City of Roseville Planning Department (PA, NA, A1 through A3); Placer County Planning Department (A4)

Impact BIO-2: Effects on Listed Vernal	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)
Pool Invertebrates and Their Habitat						

Mitigation Measure BIO-2a Secure Take Authorization for Federally Listed Vernal Pool Invertebrates and Implement Permit Conditions (Applicability – Proposed Action and All Alternatives)

No project construction shall proceed on the project until a biological opinion (BO) has been issued by USFWS. The USACE will consult with the USFWS and incorporate the BO conditions into the terms and conditions of the DA permits. The project applicant(s) will abide by permit conditions (including conservation and minimization measures) intended to be completed before on-site construction.

The Applicants will not be required to complete this mitigation measure for direct or indirect impacts that have already been mitigated to the satisfaction of USFWS through another BO or mitigation plan.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4		
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)		
Mitigation Measure BIO-2b	Mitigation Measures to Avoid and Minimize Long-Term Effects on Preserved/Avoided Crustacean							
	Habitat							
	(Applicability – Proposed Action and All Alternatives)							

- Prior to initiation of any work in waters of the U.S. for any particular phase of a project pursuant to its corresponding Department of the Army Permit, the primary open space within that phase shall be preserved with a Deed Restriction with permanent legal protection. Within three months following completion of a grading of the secondary open space bordering the primary open space, the secondary open space will be established as separate level parcel(s) with permanent legal protection.
- After each phase of the on-site mitigation has been constructed, monitored for the required period, and been determined to be successful, the parcel(s) comprising that mitigation will be accepted by the City of Roseville who will then be solely responsible for its long-term maintenance consistent with the provisions of the City of Roseville Open Space Preserve Overarching Management Plan.

In the event that a permittee elects to develop an off-site permittee-sponsored mitigation plan in lieu of purchase of wetland preservation and/or creation credits from an approved mitigation bank, that plan will be prepared and submitted to the Corps of Engineers for approval prior to initiation of work in waters of the U.S. under the corresponding Department of the Army Permit. That plan must provide for the long-term management of the mitigation area and include a long-term funding mechanism. Timing: Before the approval of any grading or improvement plans, before any ground-disturbing activities within 250 feet of said habitat, and on an ongoing basis throughout construction as applicable for all project phases.

Enforcement: U.S. Army Corps of Engineers, Sacramento District; U.S. Fish and Wildlife Service; City of Roseville Planning Department (PA, NA, A1 through A3); Placer County Planning Department (A4)

Impact BIO-3: Effects on Federally Listed	LTS	LTS	LTS	LTS	LTS	LTS
Plant Species						
PA, NA, A1, A2, A3, A4						
No mitigation is required.						

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact BIO-4: Effects on Federally Listed Amphibian and Reptile Species	LTS	LTS	LTS	LTS	LTS	LTS(m)
PA, NA, A1, A2, A3 No mitigation is required.						
A4 Mitigation described below.						

Giant Garter Snake Impact Mitigation

(Applicability – Alternative 4)

The Applicants shall develop a mitigation plan that is designed to avoid take of the species. The plan would be implemented during construction within giant garter snake aquatic and upland habitat on the alternative site.

Timing: Before the approval of any grading or improvement plans or any ground-disturbing activity within 100 feet of Giant Garter Snake habitat as applicable for all project phases.

Enforcement: U.S. Fish and Wildlife Service; California Department of Fish and Wildlife; Placer County Planning Department

Dagayuga Tayia/Immash	Proposed Action (PA)	No Action (NA)	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact		, ,	(A1)	(A2)	(A3)	(A4)
Impact BIO-5: Effects on Valley Elderberry	LTS	LTS	LTS	LTS	LTS	LTS(m)
Longhorn Beetle						
PA, NA, A1, A2, A3 No mitigation is required.						
A4						
Mitigation described below.						

Valley Elderberry Longhorn Beetle (VELB)

(Applicability – Alternative 4)

Prior to any ground disturbing or construction activities within 100 feet of the identified elderberry shrub, the Applicants shall consult with the USFWS. The Applicants shall install and maintain a 4-foot-high construction fence around the perimeter of the elderberry shrub. No grading or any other ground disturbing activities shall be conducted within the fenced protected area without prior verification that the requirements of the USFWS have been satisfied, including the issuance of any necessary permits.

The Applicants shall avoid and protect the VELB habitat (elderberry stalks 1 inch in diameter or greater) where feasible. Where avoidance is infeasible, the Applicants shall develop and implement a VELB mitigation plan in accordance with the most current USFWS mitigation guidelines for unavoidable take of VELB habitat pursuant to either Section 7 or Section 10(a) of the Federal Endangered Species Act. The mitigation plan shall include, but might not be limited to, relocation of elderberry shrubs, planting of elderberry shrubs, and monitoring of relocated and planted elderberry shrubs.

Timing: Before the approval of any grading or improvement plans or any ground-disturbing activity within 100 feet of VELB habitat as applicable for all project phases.

Enforcement: U.S. Fish and Wildlife Service; California Department of Fish and Wildlife; Placer County Planning Department

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact BIO-6: Effects on State Special- Status Plant and Wildlife Species	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)

Relocate Western Spadefoot Toad

(Applicability – Proposed Action and All Alternatives)

The location of pools that are occupied by western spadefoot toad shall be determined through surveys conducted during the appropriate season (generally February) by a qualified biologist. Those pools that are found to support western spadefoot toad shall be avoided if feasible. If avoidance is not feasible, the CDFW shall be consulted for its recommendation with respect to an adult or larval or egg masses capture and relocation plan.

Timing: Before the approval of any grading, improvement, or construction plans and before any ground-disturbing activity in any project development phase that contains vernal pools or other seasonal wetland habitats.

Enforcement: U.S. Fish and Wildlife Service; California Department of Fish and Wildlife; City of Roseville Planning Department (PA, NA, A1 through A3); Placer County Planning Department (A4)

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact BIO-7: Effects on Protected Raptor Species and Other Nesting Birds	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)

Protection of Nesting Sites

(Applicability – Proposed Action and All Alternatives)

To ensure that fully protected bird and raptor species are not injured or disturbed by construction in the vicinity of nesting habitat, the Applicants shall implement the following measures:

Raptors

- a) If a nest of a legally protected species is located in a tree designated for removal, the removal shall occur between August 30th and February 15th or until the adults and young of the year are no longer dependent on the nest site as determined by a qualified biologist.
- b) When feasible, all tree removal shall occur outside the nesting season to avoid the breeding season of any raptor species that could be using the area, and to discourage hawks from nesting in the vicinity of an upcoming construction area.
- c) For Swainson's hawk, if avoidance of tree removal outside the breeding season is not feasible, and an active nest is present, the Applicants will be required to obtain a 2081 permit from CDFW to mitigate for potential "take" under CESA. If no active nesting is occurring, a take permit would not be required.
- d) Prior to the beginning of mass grading, including grading for major infrastructure improvements, during the period between February 15th and August 30th, all trees and potential burrowing owl habitat within 350 feet of any grading or earthmoving activity shall be surveyed for active raptor nests or burrows by a qualified biologist no more than 30 days prior to disturbance. If active raptor nests or burrows are found, and the nest or burrow is within 350 feet of potential construction activity, a highly visible temporary fence shall be erected around the tree or burrow(s) at a distance of up to 350 feet, depending on the species, from the edge of the canopy to prevent construction disturbance and intrusions on the nest area.
- e) Preconstruction and non-breeding season burrowing owl exclusion measures shall be developed in consultation with CDFW, and shall preclude burrowing owl occupation of the portions of the project site subject to disturbance such as grading.
- f) No construction vehicles shall be permitted within restricted areas (i.e., raptor protection zones) unless directly related to the management or protection of the legally protected species.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)

Black Rails and Tri-colored Blackbirds

Prior to earth moving that would disturb marsh habitat, a qualified biologist shall conduct surveys to determine whether the California black rail or Tri-colored blackbird is present. If either of these species is found, all earth moving within 250 feet shall stop and measures, including establishing nest protection buffers along both sides of Curry Creek during the nesting season (generally February 1 through August 31st) shall be implemented.

Rookeries

Prior to earthmoving that would disturb marsh habitat or tree removal of the eucalyptus grove, pre-construction surveys should be conducted to verify that no rookeries have been established. If rookeries are found to be present, all earth moving within 250 feet shall stop during the breeding season.

Timing: Before the approval of grading and improvement plans, before any ground-disturbing activities, and during project construction as applicable for all project phases.

Enforcement: U.S. Fish and Wildlife Service; California Department of Fish and Wildlife; City of Roseville Planning Department (PA, NA, A1 through A3); Placer County Planning Departments (A4)

Impact BIO-8: Effects on State Special-	LTS	LTS	LTS	LTS	LTS	LTS
Status Bats						
PA, NA, A1, A2, A3, A4						
No mitigation is required.						

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact BIO-9: Effects on Wildlife	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS
Movement						
A4						
No mitigation is required.						
0 1						
PA, NA, A1, A2, A3						
Mitigation described below.						

Wildlife Movement Protection Policies

(Applicability - Proposed Action, No Action, and Alternatives 1 through 3)

To protect the long-term habitat of the stream channels and the WAPA corridor and their potential use by wildlife as movement corridors, the Applicants shall ensure that movement corridors are not obstructed and human intrusion into the corridor is minimized. In compliance with Section 1600 of the CDFW Code, the Applicant(s) will enter into a Streambed Alteration Agreement prior to conducting any construction activities within a stream corridor, which sets forth mitigation measures that the Applicant must implement. These measures shall include, but not be limited to: the use of either bridges or culverts that are large enough that wildlife have enough space to pass through road crossings without having to travel over the road surface, the implementation of bank stabilization measures, and/or restoration and revegetation of stream corridor habitat that has been damaged due to the project's construction. Furthermore, the recreational trails shall be lined by post and cable fence and signage shall be used to direct trail users to stay within the designated trail corridor and discourage access to the riparian habitat by humans and pets. The trails shall be closed after dark and no exterior lighting shall be used.

Timing: Before the approval of grading and improvement plans, ground-disturbing activities, project construction, and during project operation as applicable.

Enforcement: California Department of Fish and Wildlife; City of Roseville Planning Department

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact BIO-10: Loss of Riparian Habitat	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)	NE
A4						
No mitigation is required.						
PA, NA, A1, A2, A3						
Implement Mitigation Measure BIO-9.						
Impact BIO-11: Effects on On-Site Fish Species	LTS	LTS	LTS	LTS	LTS	LTS
Species						
PA, NA, A1, A2, A3, A4						
No mitigation is required.						
Impact BIO-12: Effects on Fish Habitat from Water Diversions	LTS	LTS	LTS	LTS	LTS	LTS
from water Diversions						
PA, NA, A1, A2, A3, A4						
No mitigation is required.						
Climate Change						
Impact GHG-1: GHG Emissions due to	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)
Construction						
PA, NA, A1, A2, A3, A4						
Implement Mitigation Measure AQ-1.						

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact GHG-2: GHG Emissions due to Operation/Occupancy	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)

Mitigation Measure GHG-2a

Air Quality Measures

(Applicability – Proposed Action and All Alternatives)

Implement Mitigation Measure 4.4-1 from the Sierra Vista Specific Plan EIR prepared by the City of Roseville. Implementation of the Air Quality Mitigation Measure 4.4-1, listed in Section 4.4 Air Quality, would reduce operational and construction-related emissions of criteria air pollutants and precursors, and would also act to reduce GHG emissions associated with project construction and operation. Mitigation Measure 4.4-1 is relevant to Impact 4.5-1 because both criteria air pollutant and GHG emissions are frequently associated with combustion byproducts. In addition, the City shall implement the following measures to reduce direct and indirect GHG emissions associated with the SVSP. Certain measures are already components of the project (i.e., Specific Plan policies, design guidelines, and standards) and/or would be applied consistent with the City's General Plan Policies, addressing GHG emissions and climate change, but are provided here for purposes of completeness.

Mitigation Measure GHG-2b

Additional Measures to Reduce GHG Emissions

(Applicability – Proposed Action and All Alternatives)

Each increment of new development within the project site requiring a discretionary approval (e.g., proposed tentative subdivision map, conditional use permit), shall demonstrate that GHG emissions from project construction and operation will be reduced by 30% from business-as- usual emissions levels projected for 2025.

For each increment of new development, the City shall submit to the developer, a list of potentially feasible GHG reduction measures to be considered in the construction and design of that portion of the project. The City's list of potentially feasible GHG reduction measures shall reflect the then-current state of the regulation of GHG emissions and climate change, which is expected to continue to evolve under the mandate of AB 32. The developer shall then submit to the City a mitigation plan that lists the measures selected to be implemented as part of the project and contains an analysis demonstrating the associated reduction in GHG emissions. The report shall also demonstrate why measures not selected are considered infeasible. The City shall review the mitigation report for the applicable increment of development and approve the report (with modifications, if considered necessary and feasible) prior to granting any requested discretionary approval for that increment of development.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)

In determining what sort of measures should appropriately be imposed by a local government under the circumstances, the City shall consider the following factors:

- The extent to which rates of GHG emissions generated by motor vehicles traveling to, from, and within the project site are projected to decrease over time as a result of regulations, policies, and/or plans that have already been adopted or may be adopted in the future by the Air Resources Board (ARB) or other public agency pursuant to AB 32, or by EPA;
- The extent to which mobile-source GHG emissions, which at the time of writing this EIR comprise a substantial portion of the state's GHG inventory, can also be reduced through design measures that result in trip reductions and reductions in trip length;
- The extent to which GHG emissions emitted by the mix of power generation operated by Roseville Electric, that will serve the project site, are projected to decrease pursuant to the Renewable Portfolio Standard required by SB 1078 and SB 107, as well as any future regulations, policies, and/or plans adopted by the federal and state governments that reduce GHG emissions from power generation;
- The extent to which replacement of CCR Title 24 with the California Green Building Standards Code or other similar requirements will result in new buildings being more energy efficient and consequently more GHG efficient;
- The extent to which any stationary sources of GHG emissions that would be operated on a proposed land use (e.g., industrial) are already subject to regulations, policies, and/or plans that reduce GHG emissions, particularly any future regulations that will be developed as part of ARB's implementation of AB 32, or other pertinent regulations on stationary sources that have the indirect effect of reducing GHG emissions;
- The extent to which the feasibility of existing GHG reduction technologies may change in the future, and to which innovation in GHG reduction technologies will continue, affecting cost-benefit analyses that determine economic feasibility; and
- Whether the total costs of proposed mitigation for GHG emissions, together with other mitigation measures, required for the proposed development, are so great that a reasonably prudent property owner would not proceed with the project in the face of such costs.

In considering how much, and what kind of, mitigation is necessary in light of these factors, the City shall consider the following list of options, though the list is not intended to be exhaustive, as GHG reduction strategies and their respective feasibility are likely to evolve over time. These measures are derived from multiple sources including the Mitigation Measure Summary in Appendix B of the California Air Pollution Control Officer's Association (CAPCOA) white paper, CEQA & Climate Change (CAPCOA 2008), and the California Attorney General's Office (2008).

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)

Energy Efficiency

- Include clean alternative energy features to promote energy self-sufficiency (e.g., photovoltaic cells, solar thermal electricity systems, small wind turbines).
- Design buildings to meet CEC Tier II requirements (e.g., exceeding the requirements of the Title 24 (as of 2007) by 35 percent).
- Site buildings to take advantage of shade and prevailing winds and design landscaping and sun screens to reduce energy use.
- Install efficient lighting in all buildings (including residential). Also install lighting control systems, where practical. Use daylight as an integral part of lighting systems in all buildings.
- Install light-colored "cool" pavements, and strategically located shade trees along all bicycle and pedestrian routes.

SVSP developers shall be encouraged incorporate "green building" points into the construction and design of all (additions of 25,000 square feet of office/retail commercial or 100,000 square feet of industrial floor area) projects that incorporate "green building" points in construction. Such points may be achieved through checklists identified by New Home Construction Green Building Guidelines available at www.builditgreen.org, or through a similar list that distinguishes specific measures targeting efficiencies in energy, resource use, or other measures that would also directly or indirectly result in GHG emission reductions. Specific efficiencies that would reduce GHG emissions shall be implemented where feasible, for all project areas including site design, landscaping, foundation, structural frame and building envelope, exterior finishing, plumbing, appliance use, insulation, heating, venting and air conditioning, building performance, use of renewable energy, finishes, and flooring.

SVSP developers shall be encouraged to incorporate any combination of the following strategies to reduce heat gain for 50 percent of the non-roof impervious site landscape (including roads, sidewalks, courtyards, parking lots, and driveways) into the construction and design of all new (additions of 25,000 square feet of office/retail commercial) projects:

- Shaded (Within five years of occupancy)
- Paving materials with a Solar Reflective Index (SRI) of at least 29
- Open grid pavement system (pavement that is less than 50 percent impervious and contains vegetation in the open cells)

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)

- Parking spaces under cover (defined as underground, under deck, under roof, or under building.) Any roof used to shade or cover parking should have an SRI of at least 29.
- Optional level of LEED certification, such as silver or gold which can allow for further reductions in energy consumption and GHG emissions.

Water Conservation and Efficiency

The SVSP project includes water conservation as part of the project. In addition, the following should be considered:

- With the exception of ornamental shade trees, use water-efficient landscapes with native, drought-resistant species in all public area and commercial landscaping. Use water-efficient turf in parks and other turf dependent spaces.
- Install the infrastructure to use recycled water for landscape irrigation (part of the project).
- Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls. (Water Efficient Landscaping Ordinance)
- Design buildings and lots to be water-efficient. Only install water-efficient fixtures and appliances (e.g., Ultra low-flow toilets, no flow urinals etc.).
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff. Prohibit businesses from using pressure washers for cleaning driveways, parking lots, sidewalks, and street surfaces unless required to mitigate health and safety concerns. These restrictions should be included in the Covenants, Conditions, and Restrictions of the community.

Solid Waste Measures

- Reuse and recycle construction and demolition waste (including, but not limited to soil, vegetation, concrete, lumber, metal, and cardboard).
- Provide interior and exterior storage areas for recyclables and green waste at all buildings.
- Provide adequate recycling containers in public areas, including parks, school grounds, paseos, and pedestrian zones in areas of mixed-use development.
- Provide education and publicity about reducing waste and available recycling services.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)

Transportation and Motor Vehicles

- Promote ride sharing programs and employment centers (e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading zones and waiting areas for ride share vehicles, and providing a web site or message board for coordinating ride sharing).
- Provide the necessary facilities and infrastructure in all land use types to encourage the use of low or zero emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations).
- At commercial land uses, all forklifts, "yard trucks," or vehicles that are predominately used on site at non-residential land uses shall be electric-powered or powered by biofuels (such as biodiesel [B100]) that are produced from waste products, or shall use other technologies that do not rely on direct fossil fuel consumption.
- Implement roundabouts. (30 percent intersection emissions reduction)
- Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations) (0.5 to 1.5 percent emissions reduction).
- Prioritized parking within new commercial and retail areas shall be given to electric vehicles, hybrid vehicles, and alternative fuel vehicles.
- Incorporate bicycle lanes, routes, and intersection improvements into street systems within the Specific Plan (1 percent emissions reduction).
- For commercial land uses, provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience (1 percent emissions reduction).
- Create Class II bicycle lanes and walking paths directed to the location of schools, parks and other destination points (1 percent emissions reduction).
- Encourage the public school districts to serve the project site with a student busing system, and/or enable students residing in the project to safely walk to or bicycle to school without encountering barriers such as large arterial roadways or sound walls.
- Construction of transit facility/amenity (bus shelters, bicycle lockers/racks, etc.) for existing public and private transit (0.5 percent emissions reduction).
- Provide secure bicycle storage at public parking facilities.

Timing: Before the approval of all grading plans, throughout project construction, and during project operation, where applicable.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Cultural Resources						
Impact CR-1: Potential to Damage Undiscovered Historic Properties or Human Remains during Construction	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)

Mitigation Measure CR-1

Discovery of Cultural Resources during Construction (Applicability – Proposed Action and All Alternatives)

Should any cultural resources, such as structural features, any amount of bone or shell, artifacts, human remains, or architectural remains, be encountered during any subsurface development activities, work shall be suspended within 100 feet (30 meters) of the find. The City of Roseville Planning and Public Works staff and the USACE staff shall be immediately notified. At that time, the City of Roseville and the USACE shall coordinate any necessary investigation of the site with qualified archaeologists as needed, to assess the resource (i.e., whether it is a historical resource, or a unique archaeological resource) and provide proper management recommendations should potential impacts to the resources be found to be significant or adverse. Possible management recommendations for important resources could include resource avoidance or, where avoidance is infeasible in light of project design or layout to avoid significant (adverse) effects, data recovery excavations. The contractor shall implement any measures deemed feasible and necessary by City and USACE staff, in consultation with the archaeologists and California State Historic Preservation Officer, as appropriate, to avoid or minimize significant (adverse) effects to the cultural resources. In addition, pursuant to Section 5097.98 or the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission, located online at http://www.nahc.ca.gov/discovery.html, shall be adhered to in the treatment and disposition of the remains.

Timing: During all ground-disturbing activities for all project phases.

Environmental Justice						
Impact EJ-1: Disproportionate Adverse Environmental Effects on Minority or Low-income Populations	NE	NE	NE	NE	NE	NE
PA, NA, A1, A2, A3, A4 No mitigation is required.						

D	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Geology, Soils, and Minerals	T. T		T		T	
Impact GEO-1: Hazard associated with Seismic Ground-shaking	LTS	LTS	LTS	LTS	LTS	LTS
Impact GEO-2: Hazard associated with Liquefaction	LTS	LTS	LTS	LTS	LTS	LTS
PA, NA, A1, A2, A3, A4 No mitigation is required.						
Impact GEO-3: Hazard associated with Slope Failure	LTS	LTS	LTS	LTS	LTS	LTS
PA, NA, A1, A2, A3, A4						
No mitigation is required.						
Impact GEO-4: Potential Structural Damage due to Expansive Soils	LTS	LTS	LTS	LTS	LTS	LTS
PA, NA, A1, A2, A3, A4						
No mitigation is required.						
Impact GEO-5: Effect on Mineral Resources	LTS	LTS	LTS	LTS	LTS	LTS
PA, NA, A1, A2, A3, A4						
No mitigation is required.						

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Hazards and Hazardous Materials						
Impact HAZ-1: Exposure to Soil or	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)
Groundwater Contamination from Past						
Uses						

Mitigation Measure HAZ-1

Groundwater Contamination

(Applicability – Proposed Action and All Alternatives)

Prior to site development in the SVSP, recommended testing and remediation, if needed shall occur. Groundwater wells shall be properly closed.

If evidence of soil contamination, septic tanks, or other underground storage tanks are encountered in previously unidentified locations in the SVSP area, work shall cease until the area can be tested, and if necessary remediated and/or properly removed or closed. Remediation activities could include removal of contaminated soil and/or on-site treatment. As part of the process, the City shall ensure that any necessary investigation and/or remediation activities are coordinated with the Roseville Fire Department, Placer County Division of Environmental Health, and if needed, other appropriate federal, state, and local agencies. Once a site is remediated, construction can continue.

Timing: Before approval of grading plans and during construction activities for all project phases.

Enforcement: Central Valley Regional Water Quality Control Board; City of Roseville Planning Department (PA, NA, A1 through A3); Placer County Planning Department (A4)

Impact HAZ-2: Hazards from Accidental Release of Hazardous Materials or Wastes	LTS	LTS	LTS	LTS	LTS	LTS
PA, NA, A1, A2, A3, A4 No mitigation is required.						
Impact HAZ-3: Hazard associated with Adjacent Natural Gas Pipeline	LTS	LTS	LTS	LTS	LTS	LTS
PA, NA, A1, A2, A3, A4 No mitigation is required.						

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact HAZ-4: Risk of Exposure to	LTS	LTS	LTS	LTS	LTS	LTS
Electromagnetic Fields from Transmission						
Lines						
PA, NA, A1, A2, A3, A4						
No mitigation is required.						
Impact HAZ-5: Risk related to Use of	LTS	LTS	LTS	LTS	LTS	LTS
Recycled Water						
B. W. J.						
PA, NA, A1, A2, A3, A4						
No mitigation is required.						
Hydrology and Water Quality						
Impact HYDRO-1: Effect related to On- or	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)
Off-Site Flood Hazards						

Mitigation Measure HYDRO-1

Payment of Drainage Impact Fees

(Applicability - Proposed Action and All Alternatives)

The City shall collect the Pleasant Grove Drainage Fee from the applicants prior to the approval of each building permit, which would cover the cost of retention for that development's portion of the Roseville regional retention basin at Reason Farms.

Timing: Before the approval of each building permit.

Impact HYDRO-2: Effects from Construction within a Floodplain	LTS	LTS	LTS	LTS	LTS	LTS
PA, NA, A1, A2, A3, A4 No mitigation is required.						

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact HYDRO-3: Exposure to Flood	LTS	LTS	LTS	LTS	LTS	LTS
Hazards related to Dam or Levee Failure						
PA, NA, A1, A2, A3, A4						
No mitigation is required.						
Impact HYDRO-4: Water Quality Effects	LTS	LTS	LTS	LTS	LTS	LTS
during Construction						
PA, NA, A1, A2, A3, A4						
No mitigation is required.						
Impact HYDRO-5: Water Quality Effects	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)
from Project Occupancy and Operation						

Mitigation Measure HYDRO-5

Stormwater Management Standards

(Applicability – Proposed Action and All Alternatives)

At the tentative map or site development stage, development shall be conditioned to include source control and treatment control measures to include LID strategies and BMP treatment as required by the City's then current design standards and the City's then current General Phase II NPDES Permit issued by the State. The measures would include, but are not limited to the measures identified above, and in Table IV.B.2 Applicable LID Measures by Development Type, found in the Sierra Vista Drainage and Stormwater Master Plan found in Appendix O of the Sierra Vista Specific Plan EIR prepared by the City of Roseville.

Timing: Before approval of grading plans and building permits for all project phases.

Impact HYDRO-6: Effect of Tertiary Treated Effluent on Pleasant Grove Creek	LTS	LTS	LTS	LTS	LTS	LTS
PA, NA, A1, A2, A3, A4						
No mitigation is required.						

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact HYDRO-7: Effect on Groundwater Recharge	LTS	LTS	LTS	LTS	LTS	LTS
PA, NA, A1, A2, A3, A4						
No mitigation is required.						
Impact HYDRO-8: Effects on Groundwater Basin	LTS	LTS	LTS	LTS	LTS	LTS
PA, NA, A1, A2, A3, A4						
No mitigation is required.						
Land Use and Planning			1	I	1	
Impact LU-1: Result in Incompatible Land Uses	LTS(am)	LTS(am)	LTS(am)	LTS(am)	LTS(am)	LTS(m)
PA, NA, A1, A2, A3, A4						
Implement Mitigation Measure AG-2.						
Impact LU-2: Physically Divide an Established Community	NE	NE	NE	NE	NE	NE
PA, NA, A1, A2, A3, A4						
No mitigation is required.						
Impact LU-3: Conflict with General Plan and Zoning Code	NE	NE	SU	NE	NE	SU
PA, NA, A2, A3						
No mitigation is required.						
A1, A4						
No mitigation is feasible.						

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4		
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)		
Impact LU-4: Conflict with SACOG Blueprint	LTS	SU	LTS	LTS	LTS	SU		
PA, A1, A2, A3								
No mitigation is required.								
NA, A4								
No mitigation is feasible.								
Noise								
Impact NOISE-1: Construction Noise and Vibration	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)		

Mitigation Measure NOISE-1

Construction Noise Policies

(Applicability – Proposed Action and All Alternatives)

Construction activities shall comply with the requirements of the City of Roseville Noise Ordinance

- Locate fixed construction equipment such as compressors and generators as far as possible from sensitive receptors. Shroud or shield all impact tools, and muffle or shield all intake and exhaust ports on power construction equipment.
- Designate a construction disturbance coordinator and conspicuously post the Coordinator's contact information around the project site and in adjacent public spaces. The disturbance coordinator will receive all public complaints about construction noise disturbances, and will be responsible for determining the cause of the complaint, and implementing any feasible measures to be taken to alleviate the problem.
- Well drilling shall occur prior to construction of the adjacent subdivision, to the extent feasible. If construction timing for the wells occurs after subdivision construction, then measures to reduce noise shall include hanging flexible sound control curtains around the drilling apparatus, and the drill rig, to the degree feasible, as determined by the City, if located within 1,000 feet (305 kilometers) of an occupied residence.

Timing: During all phases of project construction.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact NOISE-2: Noise from On-Site Activities	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)

Mitigation Measure NOISE-2a

Commercial Noise Controls

(Applicability – Proposed Action and All Alternatives)

For commercial uses within 150 feet (46 meters) of residential uses, the applicants shall implement the following or equally effective measures:

- In general, where commercial land uses adjoin residential property lines, the following measures should be included in the design of the commercial use. If the primary noise sources are parking lots, HVAC equipment and light truck deliveries, then 6- to 7-foot-tall masonry walls shall be constructed to provide adequate isolation of parking lot and delivery truck activities. HVAC equipment shall be located either at ground level, or when located on rooftops the building facades shall include parapets for shielding.
- Where commercial uses adjoin common residential property lines, and loading docks or truck circulation routes face the residential areas, the following mitigation measures shall be included in the project design:
 - Loading docks and truck delivery areas shall maintain a minimum distance of 30 feet from residential property lines.
 - Property line barriers shall be 6 to 8 feet (1.8 to 2.4 meters) in height. Circulation routes for trucks shall be located a minimum of 30 feet (9 meters) from residential property lines.
 - All heating, cooling, and ventilation equipment shall be located within mechanical rooms where possible.
 - All heating, cooling, and ventilation equipment shall be shielded from view with solid barriers.
 - Emergency generators shall comply with the local noise criteria at the nearest noise-sensitive receivers.
 - In cases where loading docks or truck delivery circulation routes are located less than 100 feet (30 meters) from residential property lines, an acoustical evaluation shall be submitted to verify compliance with the City of Roseville Noise Level Performance Standards.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4		
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)		
Mitigation Measure NOISE-2b	Measure NOISE-2b Attenuate Park Noise							
(Applicability – Proposed Action and All Alternatives)								
	Activities at the proposed community-wide park shall be scheduled to occur during daytime hours							
	(7:00 AM to 10):00 PM).						

- Public address (PA) systems shall be designed, installed, and tested to comply with the requirements of the City of Roseville Municipal Code Noise Ordinance at the nearest sensitive receptors.
- Wood fencing, or 160-foot (49 meters) setbacks adjacent to active recreation areas, shall be included in the project design where neighborhood parks abut residential uses.

Timing: During design review and before the approval of all plans, where applicable for all project phases.

Enforcement: City of Roseville Planning Department (PA, NA, A1 through A3); Placer County Planning Department (A4)

Impact NOISE-3a: Increase in Traffic	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)
Noise at Buildout (Year 2025) (On-site						
Sensitive Receptors)						

Mitigation Measure NOISE-3a

Traffic Noise Attenuation

(Applicability – Proposed Action and All Alternatives)

- Masonry walls and/or landscaped berms shall be constructed along the major project-area roadways adjacent to proposed residential uses if acoustical studies warrant sound attenuation, otherwise standard wood fencing is acceptable. Table 4.6-10 data from the Sierra Vista Specific Plan EIR prepared by the City of Roseville shall be consulted to determine appropriate barrier heights. If the assumptions shown in Table 4.6-10 vary considerably, a detailed analysis of exterior and interior mitigation measures should be conducted when tentative maps become available.
- In areas requiring sound attenuation, noise barrier walls shall be constructed of concrete panels, concrete masonry units, earthen berms, or any combination of these materials. Wood is not recommended for construction due to eventual warping and degradation of acoustical performance.
- Tentative map applications for residential uses located along Fiddyment Road shall be required to include an analysis of interior noise levels. The report shall be prepared by a qualified acoustical engineer and shall specify the measures required to achieve compliance with the City of Roseville 45 dB Ldn interior noise level standard.

Timing: During design review and before the approval of all plans, where applicable for all project phases.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact NOISE-3b: Increase in Traffic Noise at Buildout (Year 2025) (Off-site sensitive receptors)	SU	SU	SU	SU	SU	SU(m)
PA, NA, A1, A2, A3						
No mitigation is feasible.						
A4						
Mitigation described below.						

Mitigation Measure NOISE-3b

Traffic Noise Attenuation

(Applicability – Alternative 4)

- Tentative map applications for residential uses on the Alternative 4 site shall be required to include an analysis of noise levels at on-site and off-site sensitive receptor locations. The reports shall be conducted by a qualified acoustical engineer and shall specify the measures required to achieve compliance with the Placer County standards for interior and exterior noise levels. Exterior and interior masonry walls and/or landscaped berms shall be constructed if acoustical studies indicate that sound attenuation is required. Data from the acoustical studies shall be consulted to determine appropriate barrier heights.
- In areas requiring sound attenuation, noise barrier walls shall be constructed of concrete panels, concrete masonry units, earthen berms, or any combination of these materials. Wood is not recommended for construction due to eventual warping and degradation of acoustical performance.

Timing: During design review and before the approval of all plans, where applicable for all project phases.

Impact NOISE-4: Aviation Noise	LTS	LTS	LTS	LTS	LTS	LTS
PA, NA, A1, A2, A3, A4						
No mitigation is required.						

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Public Services						
Impact PUB-1: Demand for Law	LTS	LTS	LTS	LTS	LTS	LTS(m)
Enforcement Services						
PA, NA, A1, A2, A3						
No mitigation is required.						

Mitigation Measure PUB-1

Funding for Police Service Impacts

(Applicability – Alternative 4)

The Applicants shall be required to establish a special benefit assessment district or other funding mechanism to ensure adequate funding for law enforcement services, with funding responsibilities imposed on residential and commercial properties within the Specific Plan area, including the costs for services required to satisfy the General Plan standards now in existence or as later amended. The funding mechanism shall be subject to the prior review and approval of Placer County.

Timing: Before approval of improvement plans for all project phases.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact PUB-2: Demand for Fire Protection	LTS	LTS	LTS	LTS	LTS	LTS(m)
Services						
PA, NA, A1, A2, A3						
No mitigation is required.						
A4						
Mitigation described below.						

Mitigation Measure PUB-2

Funding for Fire Protection Service Impacts (Applicability – Alternative 4)

The Applicants shall establish a special benefit assessment district or other funding mechanism to ensure adequate funding for the ongoing maintenance and operation of fire protection and related services, with funding responsibilities imposed on residential and commercial properties within the Specific Plan area. The funding mechanism shall be subject to the prior review and approval of Placer County, and shall be approved by the affected landowners prior to recordation of the first final subdivision map. It shall be maintained until such time as the County determines that property tax revenues are adequate to maintain the required staffing.

Timing: Before approval of improvement plans for all project phases.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact PUB-3: Demand for School	LTS	LTS	LTS	LTS	LTS	LTS
Facilities						
PA, NA, A1, A2, A3, A4						
No mitigation is required.						
Impact PUB-4: Demand for Library	LTS	LTS	LTS	LTS	LTS	LTS(m)
Services						
PA, NA, A1, A2, A3						
No mitigation is required.						
A4						
Mitigation described below.						

Mitigation Measure PUB-4

Funding for Library Services

(Applicability – Alternative 4)

Formation of a County Service Area, Community Facilities District, or other financing mechanism acceptable to the County shall be required prior to recordation of the first final small lot subdivision map to ensure that immediate funding for adequate library infrastructure consistent with County standards is in place. The Specific Plan developers shall enter into a Development Agreement to ensure a fair share contribution to adequate library facilities, and that such facilities are available prior to demonstrated need.

Timing: Before approval of improvement plans for all project phases.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Transportation and Traffic						
Impact TRA-1: Increased Traffic at City of Roseville Intersections	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)

Mitigation Measure TRA-1a

Pay fair share of the cost of improvements in the City of Roseville CIP (Applicability – Proposed Action and All Alternatives)

Pay Fair Share of Improvements in the CIP including improvements to the following intersections:

- Fiddyment/Baseline Road: improve intersection as part of the project
- Watt Avenue/Baseline Road: improve intersection as part of the project
- Baseline Road: widen to four-lane facility from Fiddyment Road to western Specific Plan Boundary.

Improvements would be necessary to the following intersections, as part of the project to achieve acceptable service levels under the 2025 CIP plus Project scenario. However, as noted, many intersections cannot be mitigated because of constraints.

- 1. Foothills Boulevard and Baseline Road: No feasible mitigation
- 2. Industrial Avenue and Alantown Drive: No feasible mitigation
- 3. Cirby Way and Northridge Drive: No feasible mitigation
- 4. Foothills Boulevard and Junction Boulevard: No feasible mitigation
- 5. Junction Boulevard and Baseline Road: No feasible mitigation
- 6. Roseville Parkway and Sierra College Boulevard: No feasible mitigation
- 7. Blue Oaks Boulevard and Crocker Ranch Road: Re-stripe to include two south bound to east bound left turn lanes and a separate right turn. This improvement will be added to the City of Roseville's Capital Improvement program. Development within the Sierra Vista Specific Plan Area will be required to pay fair share costs for this improvement
- 8. Blue Oaks Boulevard and New Meadow Drive: Re-stripe the southbound through lane to a shared through and left-turn lane. This improvement will be added to the City of Roseville's Capital Improvement program. Development within the Sierra Vista Specific Plan Area will be required to pay fair share costs for this improvement. As such, this impact would be reduced to less than significant.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)

- 9. Foothills Boulevard and Baseline/Main: No feasible mitigation
- 10. Sunrise Boulevard and Sandringham/Kensington: add a dedicated southbound right-turn lane
- 11. Woodcreek Oaks and Baseline Road: construction of a second eastbound through lane. This improvement is currently in the City's CIP program. SVSP would be required to pay fair share costs for this improvement.

The SVSP will develop over a period of years. Therefore, the impacts on these intersections would occur over a period of time. As with other improvements in the 2025 CIP, the City will monitor traffic conditions and determine when specific improvements are needed. The City of Roseville's traffic impact fees should be revised to include the SVSP area. Specific Plans and/or development proposals shall provide for fair share contributions of the cost of the improvements through the updated traffic impact fees.

Construction of intersection improvements could have impacts on biological and cultural resources, air quality, water quality, and noise levels. These impacts will be evaluated as part of the CIP update to incorporate the adopted mitigation.

Mitigation Measure TRA-1b Pay fair share of the improvements to City of Roseville intersections (Applicability – Alternative 4)

The proposed development will pay its fair share of the cost of necessary improvements (if feasible) to the City of Roseville intersections by paying traffic impact fees to the City of Roseville. The City will monitor traffic conditions and determine when specific improvements are needed.

Timing: Before approval of the first subdivision map.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact TRA-2: Increased Traffic at Placer	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)
County Intersections and Roadway						
Segments						

Mitigation Measure TRA-2a

Pay fair share of the cost of improvements to Placer County roadway segments (Applicability – Proposed Action, No Action, and Alternatives 1 through 3)

Baseline Road, west of Watt Avenue: Sierra Vista would participate in the City/County Joint Fee Program that would fund this improvement. As such this impact would be considered less than significant.

- Watt Avenue south of Baseline Road: This segment is not included within the existing City/County Fee Program.
- Walerga Road south of Baseline: This segment is not included within the existing City/County Fee Program.

The City shall determine the means of providing the project's fair share to fund these improvements with Placer County through the inter-agency agreement or other arrangement required by Mitigation Measure 4.3-2 in the Sierra Vista Specific Plan EIR prepared by the City of Roseville.

Mitigation Measure TRA-2b Pay fair share of the cost of Walerga Road and PFE Road intersection improvements (Applicability – Alternatives 3 and 4)

The proposed development will pay its fair share of the cost of necessary improvements to the intersection of Walerga Road and PFE Road by paying traffic impact fees to Placer County. The County will monitor traffic conditions and determine when specific improvements are needed. Potential improvements to address this impact include two northbound and southbound through lanes, as well as two southbound and eastbound left turn lanes to accommodate the additional traffic accessing the site.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Mitigation Measure TRA-2c	Pav fair share	of the cost of Base	line Road and B	rewer Road inters	ection improvemen	nts

(Applicability – Alternative 4)

The proposed development will pay its fair share of the cost of necessary improvements to the intersection of Baseline Road and Brewer Road by paying traffic impact fees to Placer County. The County will monitor traffic conditions and determine when specific improvements are needed. Potential improvements to address this impact include two northbound and southbound through lanes, as well as two southbound and eastbound left turn lanes to accommodate the additional traffic accessing the site.

Timing: Before approval of the first subdivision map.

Enforcement: Placer County; City of Roseville Planning Department

Resource Topic/Impact	Proposed Action (PA)	No Action (NA)	Alternative 1 (A1)	Alternative 2 (A2)	Alternative 3 (A3)	Alternative 4 (A4)
Impact TRA-3: Increased Traffic at Sacramento County Intersections and Roadway Segments	SU(m)	LTS	LTS	LTS	LTS	LTS
NA, A1, A2, A3, A4 No mitigation is required.						
PA Mitigation described below.						

Mitigation Measure TRA-3

Pay fair share of the cost of improvements to Sacramento County roadway segments (Applicability – Proposed Action)

- Walerga Road
- Watt Avenue

Consistent with Placer County's Mitigation Measure 4.7-2a for the Placer Vineyards Specific Plan and Mitigation Measure 6.12-1 for the Regional University Specific Plan, which require Placer County to attempt to enter into an agreement with Sacramento County in order to mitigate the significant effects of the those two Placer County projects within Sacramento County, the City of Roseville shall negotiate in good faith to enter into a fair agreement with Sacramento County regarding Sierra Vista's fair share mitigation for this improvement. In reaching an accommodation with Sacramento County, the City and Sacramento County, in order to better ensure an effective sub-regional approach to mitigating transportation-related impacts, may choose to include within the same agreements or Joint Powers Authority additional public agencies with whom it must work to mitigate transportation-related impacts, such as Placer County, Sutter County, and Caltrans. As the City strives to achieve agreement(s) with one or more of these other agencies, the City shall insist that "fair share" fee obligations be reciprocal, in the sense that the other local agencies, in accepting fair share contributions from the SVSP developers, must agree to require new development occurring in their own jurisdictions to make fair share contributions towards mitigating the significant effects of such development on the City's transportation network. Any such arrangement(s), with just Sacramento County or with additional agencies, shall account for existing inter-agency fee programs in order to avoid requiring redundant mitigation or fee payments exceeding fair share mitigation levels.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)

The City intends that its arrangement(s) with Sacramento County and any other agencies shall permit the participating agencies flexibility in providing cross jurisdictional credits and reimbursements consistent with the general "fair share" mitigation standard, and require an updated model run incorporating the best available information in order to obtain the most accurate, up-to-date impact assessment feasible and to generate the most accurate, up-to-date estimates of regional fair share contributions. These arrangements, moreover, should also include provisions that allow for periodic updates to the traffic modeling on which fair share payment calculations depend in order to account for (1) newly approved projects cumulatively contributing to transportation related impacts and that therefore should contribute to the funding of necessary improvements (e.g., the Curry Creek Community Plan in Placer County); (2) additional physical improvements necessitated in whole or in part by newly approved projects; and (3) changing cost calculations for the construction of needed improvements based on changes in the costs of materials, labor, and other inputs. Implementation of MM 4.3-4 in the Sierra Vista Specific Plan EIR prepared by the City of Roseville would reduce impacts to a less than significant level; however, these improvements lie outside the jurisdiction of the City of Roseville.

Timing: Before approval of the first subdivision map.

Enforcement: Sacramento County; City of Roseville Planning Department

Impact TRA-4: Increased Traffic at Sutter	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)
County Intersections and Roadway						
Segments						

Mitigation Measure TRA-4

Pay fair share of the cost of improvements to Sutter County roadway segments (Applicability – Proposed Action and All Alternatives)

- Reigo Road and Pleasant Grove South
- Riego Road and Pleasant Grove North
- Riego Road

The City of Roseville shall negotiate in good faith to enter into a fair agreement with Sutter County regarding Sierra Vista's fair share mitigation for this improvement. In reaching an accommodation with Sutter County, the City and Sutter County, in order to better ensure an effective sub-regional approach to mitigating transportation-related impacts, may choose to include within the same agreements or Joint Powers Authority additional public agencies with whom it must work to mitigate transportation-related impacts, such as Placer County, Sacramento County, and Caltrans.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4		
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)		
As the City strives to achieve agreement(s) with one or more of these other agencies, the City shall insist that "fair share" fee obligations be reciprocal, in the								
sense that the other local agencies, in acc	cepting fair share cor	itributions from the S	SVSP developers, n	nust agree to require	new development oc	ccurring in their		
own jurisdictions to make fair share con	tributions towards n	nitigation the significa	ant effects of such	development on the	City's transportation	network. Any		
such arrangement(s), with just Sutter C	ounty or with additi	onal agencies, shall a	ccount for existing	g interagency fee prog	grams in order to avo	oid requiring		
redundant mitigation or fee payments ex	cceeding fair share m	itigation levels. The (City intends that i	ts arrangement(s) w	ith Sutter County an	id any other		
agencies shall permit the participating ag	gencies flexibility in	providing cross-juris	dictional credits a	nd reimbursements o	consistent with the g	eneral "fair share"		
mitigation standard, and require an upd	ated model run inco	rporating the best ava	ilable information	in order to obtain th	ie most accurate, up-	to-date impact		
assessment feasible and to generate the n	nost accurate, up-to-	date estimates of regio	onal fair share con	tributions. These arr	angements, moreove	r, should also		
include provisions that allow for periodic	c updates to the traff	ic modeling on which	fair share paymer	ıt calculations depen	d in order to account	for (1) newly		
approved projects cumulatively contribu	ting to transportation	on-related impacts and	d that therefore sh	ould contribute to th	e funding of necessar	ry improvements		
(e.g., the Curry Creek Community Plan	in Placer County); (2) additional physical	l improvements ne	ecessitated in whole o	or in part by newly a	pproved projects;		
and (3) changing cost calculations for th	e construction of nee	eded improvements bo	ased on changes in	the costs of material	ls, labor, and other in	puts.		
Implementation of MM 4.3-7 in the Sier	ra Vista Specific Pla	n EIR prepared by th	e City of Roseville	would reduce impac	ets to a less than sign	ificant level;		
however, these improvements lie outside	the jurisdiction of th	he City of Roseville. A	As such, this impac	ct is considered signi	ficant and unavoidal	ole.		
Timing: Before approval of the first s	subdivision map.							
Enforcement: Sutter County; City of	Roseville Planning	g Department (PA,N	NA, A1 through	A3); Placer County	/ Planning Departn	nent (A4)		
Impact TRA-5: Increased Traffic along	LTS	LTS	LTS	LTS	LTS	LTS		
City of Rocklin Roadway Segments								
PA, NA, A1, A2, A3, A4								

No mitigation is required.

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact TRA-6: Increased Traffic at State Highway Intersections and Segments	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)

Mitigation Measure TRA-6

Pay fair share of the cost of improvements to state highway segments (Applicability – Proposed Action and All Alternatives)

No specific improvements have been identified to mitigate project impacts on I-80, SR 70/99, or SR 65; however, the City is willing to work with Caltrans & the Placer County Transportation Planning Agency (PCTPA) to establish a regional approach to institute a fee program for the purpose of funding improvements on these facilities. If and when Caltrans and the City enter into an enforceable agreement, the Project shall pay impact fees to the City of Roseville in amounts that constitute the Project's fair share contributions to the construction of transportation facilities and/or improvements, consistent with the Mitigation Fee Act (Gov. Code, Sec. 66000 et seq.).

The City shall determine the means of providing the project's fair share of the funds for these improvements to Caltrans through the inter-agency agreement or other arrangement required by Mitigation Measure 4.3-6 in the Sierra Vista Specific Plan EIR prepared by the City of Roseville.

Timing: Before approval of the first subdivision map.

Enforcement: Caltrans; Placer County Transportation Planning Agency; City of Roseville Planning Department

Impact TRA-7: Increased Demand for	LTS	LTS	LTS	LTS	LTS	LTS
Local Transit Service						
PA, NA, A1, A2, A3, A4						
No mitigation is required.						
Impact TRA-8: Increased Demand for	LTS	LTS	LTS	LTS	LTS	LTS
Local Bicycle Facilities						
PA, NA, A1, A2, A3, A4						
No mitigation is required.						

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Utilities and Service Systems						
Impact UTIL-1: Availability of Water	LTS	LTS	LTS	LTS	LTS	LTS
Supplies to Meet Demand						
PA, NA, A1, A2, A3, A4						
No mitigation is required.						
Impact UTIL-2: Groundwater Demand	LTS	LTS	LTS	LTS	LTS	LTS
Impacts						
PA, NA, A1, A2, A3, A4						
No mitigation is required.						
Impact UTIL-3: Capacity of Water	LTS	LTS	LTS	LTS	LTS	LTS
Treatment and Supply Facilities						
PA, NA, A1, A2, A3, A4						
No mitigation is required.						

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact UTIL-4: Impacts from Construction	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)	LTS(m)
or Expansion of Wastewater Facilities						

Mitigation Measure UTIL-4

WWTP Capacity

(Applicability – Proposed Action and All Alternatives)

Prior to obtaining building permits in the SVSP, the applicants shall demonstrate to the City that the South Placer Wastewater Authority has approved expansion of the South Placer Wastewater Authority service area boundary to include the SVSP area. The applicants shall participate financially through connection fees in the construction of additional wastewater treatment capacity sufficient to accommodate projected flows. Applicant shall also participate on a fair share basis in other financial mechanisms for any additional environmental review required to secure approvals necessary to increase wastewater discharges from the plant, including approval by the South Placer Wastewater Authority for expansion of the service area boundary. It is recognized that the applicants will rely on the City (on behalf of the South Placer Wastewater Authority partners) to construct regional treatment and regional transmission facilities needed to discharge treated wastewater flows from within the service area boundary. In the event the City is unable to obtain the appropriate permits (e.g., NPDES permit) or is unable to complete the required facility expansions, development within the service area boundary may continue until existing capacity has been exhausted, at which time any remaining development will be curtailed until such time that sufficient treatment and discharge capacity becomes available. Further, the applicants and/or the City, as appropriate, shall implement all relevant construction-related mitigation measures for expansion of the plant listed in Appendix H of the Sierra Vista Specific Plan EIR prepared by the City of Roseville and all water quality and aquatic resource mitigation measures applicable to this project as listed in Table 4.12.3-5 of the Sierra Vista Specific Plan EIR.

Timing: Before approval of final maps and issuance of building permits for any project phases.

Enforcement: City of Roseville Public Works and Planning Departments (PA,NA, A1 through A3); Placer County Planning and Public Works Departments (A4)

	Proposed Action	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Resource Topic/Impact	(PA)	(NA)	(A1)	(A2)	(A3)	(A4)
Impact UTIL-5: Increased Demand for Solid Waste Services	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)	SU(m)

Mitigation Measure UTIL-5

Expand the Regional Landfill

(Applicability – Proposed Action and All Alternatives)

Development in the SVSP Area and Urban Reserve shall pay collection fees to the City of Roseville, a portion of which shall be used to service bonds necessary to fund landfill expansion. As a member of the WPWMA, the City of Roseville can support the expansion of the landfill, as needed; however, the City cannot compel the WPWMA to expand the landfill.

Timing: Before approval of final maps and issuance of building permits for any project phases.

Enforcement: City of Roseville Public Works and Planning Departments (PA,NA, A1 through A3); Placer County Planning and Public Works Departments (A4)

Impact UTIL-6: Increased Demand for	LTS	LTS	LTS	LTS	LTS	LTS
Electricity, Natural Gas, and						
Telecommunications						
PA, NA, A1, A2, A3, A4						
No mitigation is required.						

Significant effects that cannot be reduced to less than significant are indicated in bold

NE: No effect

 $LTS: Less\ than\ significant,\ no\ mitigation$

LTS(m): Less than significant after mitigation

LTS(am): Less than significant, additional mitigation applied

SU: Significant effect, no mitigation feasible

SU(m): Significant residual effect after mitigation

2.0 COMMENTS ON THE DRAFT EIS AND RESPONSES TO COMMENTS

2.1 INDEX TO COMMENTS

As described in **Section 1.0, Introduction**, all comments on the Draft Environmental Statement (Draft EIS) received from the public and agencies has been numbered, and the numbers assigned to each comment are indicated on the written communications that follow. All agencies, organizations, and individuals who commented on the Draft EIS are listed in **Table 2.0-1, Index to Comments**, below.

Table 2.0-1
Index to Comments

Comment Letter	Letter Date	Agency/Individuals		
Federal Agencies				
A	August 20, 2012	U.S. Department of the Interior, Office of Environmental Policy and Compliance, Patricia Port, REO		
В	September 4, 2012	U.S. Environmental Protection Agency, Enrique Manzanilla, Director		
Local Agencies				
С	August 17, 2012	City of Roseville, Kathy Pease, AICP		
Organizations				
D	August 17, 2012	Pacific Gas and Electric Company, Chris Ellis		
Е	August 20, 2012	Sierra Vista Owners Group, Jeff Jones		
Individuals				
F	August 20, 2012	Janet Laurain		

2.2 RESPONSES TO INDIVIDUAL COMMENTS

This chapter contains the comment letters received on the July 2012 Draft EIS for the Sierra Vista Specific Plan project. Following each comment letter are responses to individual comments. It is recommended that reviewers use the index to comments presented above to locate comments from specific agencies or persons and the responses to those comments.



United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Pacific Southwest Region
333 Bush Street, Suite 515
San Francisco, CA 94104

IN REPLY REFER TO: (ER 12/490)

Filed Electronically

20 August 2012

Mr. James T. Robb U.S. Army Corps of Engineers Sacramento District Regulatory Division 1325 J Street, Room 1350 Sacramento, California 95814

Subject: Draft Environmental Impact Statement for the Sierra Vista Specific Plan Project,

Placer County, CA

Dear Mr. Robb:

The Department of the Interior has received and reviewed the subject document and has no comments to offer.

Sarkerson Vorx

Thank you for the opportunity to review this project.

Sincerely,

Patricia Sanderson Port Regional Environmental Officer

cc:

Director, OEPC

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United States Department of the Interior OFFICE OF THE SECRETARY

Office of Environmental Policy and Compliance 1849 C Street, NW – MS2462-MIB Washington, D.C. 20240



9043.1 PEP/NRM July 6, 2012

ELECTRONIC MAIL MEMO

To: Assistant Secretary, Indian Affairs

Director, Fish and Wildlife Service Director, Geological Survey Director, National Park Service

Director, Bureau of Land Management Commissioner, Bureau of Reclamation

From: Team Leader, Natural Resources Management

Office of Environmental Policy and Compliance

Subject: Draft Environmental Impact Statement for the Sierra Vista Specific Plan Project,

Placer County, CA

(ER12/0490) Agency Due Date: August 20, 2012

The US Army Corps of Engineers has published a draft environmental impact statement (DEIS) that analyzes the potential effects of implementing the proposed action and alternatives for development of a large-scale, mixed-use, mixed-density master-planned community on the approximately 1,612-acre Sierra Vista Specific Plan area, located in the City of Roseville, Placer County, California. The *Federal Register* notice of availability may be viewed at http://www.gpo.gov/fdsys/pkg/FR-2012-07-06/pdf/2012-16545.pdf. The document is available from a menu at

http://www.spk.usace.army.mil/Missions/Regulatory/Overview/EnvironmentalImpactStatements_aspx.

Please have your appropriate field-level office review the document from its particular jurisdiction or special expertise and provide its comments **or indicate "no comment"** to the Office of Environmental Policy and Compliance, Regional Environmental Officer (REO), San Francisco, CA by **August 14, 2012.**

Related review: ER08/344 (NOI)

/s/07/06/12 Dave Sire

cc: REO/San Francisco

OEPC Staff Contact: Loretta B. Sutton, 202-208-7565; Loretta Sutton@ios.doi.gov

ENVIRONMENTAL REVIEW CLOSEOUT WORKSHEET

Date: 8/20/2012

ER # 12/490

		DATE OF R	ESPONSE	
BUREAU	PERSON RESPONDING	WRITTEN	ORAL	COMMENTS PROVIDED
BLM				
BIA				
BOR	Theresa Taylor	08/07/2012		No Comment
FWS				
USGS	Brenda Johnson	08/09/2012		No Comment
NPS	Alan Schmierer	08/07/2012		No Comment
OSM				

Date received from lead Bureau: 07/06/2012

REO signature date: 08/20/2012

Agency comment due date: 08/14/2012 ** Key to comment abbreviations:

E = Editorial

S = Substantive comment (additional information/analysis)

M = Recommend additional mitigation, project modification, and/or different alternative

Letter A: U.S. Department of the Interior, Office of Environmental Policy and Compliance, Patricia Port, REO, dated August 20, 2012

Response A-1

The comment is noted.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX 75 Hawthorne Street San Francisco, CA 94105-3901

September 4, 2012

James Robb U.S. Army Corps of Engineers, Sacramento District 1325 J Street, Room 1480 Sacramento, California 95814-2922

Subject: Sierra Vista Specific Plan Draft Environmental Impact Statement (EIS), Placer County, California [CEQ #20120230]

Dear Mr. Robb:

The U.S. Environmental Protection Agency (EPA) has reviewed the above referenced document. Our review and comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's (CEQ) NEPA Implementation Regulations at 40 CFR 1500 - 1508, and our review authority under Section 309 of the Clean Air Act.

EPA supports and appreciates the efforts of the U.S. Army Corps of Engineers (Corps) and partners involved in this project area to produce a unified approach in a single EIS. We have rated this Draft EIS as EO-2 – Environmental Objections-Insufficient Information (see Enclosure 1: "Summary of Rating Definitions and Follow-Up Action"), however, because the Proposed Action in the Draft EIS does not appear to be the least environmentally damaging practicable alternative (LEDPA), and does not propose appropriate compensatory mitigation for aquatic resource impacts.

The Proposed Action would adversely affect 24.81 acres of waters of the U.S., including 7.9 acres of vernal pools. In 2008, EPA identified the vernal pools on the project site as an Aquatic Resource of National Importance (ARNI), and determined that the project, as proposed at that time, would have significant and unacceptable impacts to ARNI. The Draft EIS does not demonstrate compliance with the Clean Water Act Section 404(b)(1) Guidelines, which require the Corps to permit only the LEDPA, based on an alternative's avoidance and minimization of impacts to waters. Tens of thousands of acres of land supporting vernal pools and related ecosystems are threatened by numerous proposed developments in western Placer County and adjacent Sacramento County. The Sierra Vista Specific Plan and other proposed development projects could potentially adversely affect 50 percent of the remaining vernal pool complexes in western Placer County. EPA would like to work with the Corps during the development and identification of the LEDPA and compensatory mitigation plan for this project. The Final EIS should identify the Environmentally Preferable Alternative and the LEDPA and explain the basis for these designations. Please see enclosures 2 and 3 for our detailed comments.

2.0-6

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The proposed project is located in an area that is federally designated as non-attainment for ozone and PM2.5 (particulate matter smaller than 2.5 microns), and EPA has serious concerns regarding the significant cumulative impacts to air quality within the Sierra Vista cumulative effects study area. Research has shown that these air pollutants can trigger a variety of health problems and may exacerbate conditions such as asthma. The Final EIS should include additional information regarding cumulative impacts to air quality; provide air emissions dispersion modeling results; and demonstrate that the project's emissions would conform to the State Implementation Plan and not cause or contribute to violations of the National Ambient Air Quality Standards. Please see enclosure 2 for our detailed comments regarding air quality.

We appreciate the opportunity to review this Draft EIS. Please note that starting October 1, 2012, EPA Headquarters will not accept paper copies or CDs of EISs for official filing purposes. Submissions on or after October 1, 2012 must be made through EPA's new electronic EIS submittal tool: *e-NEPA*. To begin using *e-NEPA*, you must first register with EPA's electronic reporting site - https://cdx.epa.gov/epa home.asp. Electronic submission does not change requirements for distribution of EISs for public review and comment, and lead agencies should still provide one hard copy of each Draft and Final EIS released for public circulation to the EPA Region 9 office in San Francisco (mailcode CED-2).

If you have any questions, please call me at (415) 972-3843 or contact Jeanne Geselbracht, our lead NEPA reviewer for this project, at geselbracht.jeanne@epa.gov or (415) 972-3853.

Sincerely.

Enrique Manzanilla, Director Communities and Ecosystems Division

Enclosures:

- (1) Summary of Rating Definitions and Follow-Up Action
- (2) EPA's detailed comments on the Sierra Vista Specific Plan Draft EIS
- (3) EPA letter to Corps regarding Sierra Vista Specific Plan (PN 200601050), April 28, 2008

Cc: Placer County Air Pollution Control District Kelly Berrie, U.S. Fish and Wildlife Service

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SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEO.

*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

Sierra Vista Specific Plan Draft EIS **EPA Detailed Comments - September 2012**

Project Alternatives

EPA continues to object to Clean Water Act Section 404 authorization for the Sierra Vista Specific Plan project as proposed because the Proposed Action does not appear to be the least environmentally damaging practicable alternative (LEDPA). Based on information in the Draft EIS, it appears that, among the action alternatives assessed, Alternative 1- Reduced Footprint/Increased Density would result in the lowest level of environmental impacts for the majority of the resource categories assessed, and has not been demonstrated impracticable under the Clean Water Act Section 404(b)(1) Guidelines (Guidelines). As described in the Draft EIS, Alternative 1 would slightly increase the number of residential units, but would also increase designated open space in areas with the greatest concentrations of sensitive habitat (vernal pools and/or drainages). Under this alternative, total acres developed would be 1,027 acres (vs. 1,370 acres under the Proposed Action); open space would be 599 acres (vs. 257 acres); and the residential footprint would be 593 acres (vs. 820 acres), maintaining the number of units through higher densities. Alternative 1 represents a 65% reduction of impacts to aquatic resources overall (from 24.81 acres to 8.66 acres), including a two-thirds reduction of impacts to vernal pools (from 7.9 acres to 2.6 acres).

Aquatic Resources of National Importance and Compliance with the Guidelines

By letter dated April 28, 2008, EPA identified the vernal pools on the project site as an Aquatic Resource of National Importance (ARNI), and determined that the project, as proposed, would have significant and unacceptable impacts to ARNI. Consistent with the 1992 Memorandum of Agreement between EPA and the Corps regarding Section 404(q) of the CWA, this permit action remains a candidate for review by EPA and Corps Headquarters. Our 2008 letter provides detailed comments regarding our concerns with the project's impacts to ARNI and is incorporated into these comments by reference (Enclosure 3).

Based on information currently available, the Sierra Vista Applicants Group (applicants) have not demonstrated compliance with the Guidelines, which require the Corps to permit only the LEDPA, based on an alternative's avoidance and minimization of impacts to waters. In addition, the Guidelines require compensatory mitigation of unavoidable impacts to waters. EPA believes that the Proposed Action is not the LEDPA and that further avoidance of waters is practicable and necessary. While the proposed project generally avoids impacts to the two main drainages on the site (Curry and Federico Creeks), it would eliminate 68 percent of the site's waters, overall. The majority of these impacts (21.12 acres) will occur to depressional wetlands, including vernal pools, seasonal wetlands and seasonal swales. These wetlands are habitat to several special-status plant and wildlife species that are protected under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA), including Dwarf downingia (Downingia pusilla) and Conservancy fairy shrimp (Branchinecta conservatio). Furthermore, the project is located within the Western Placer County core recovery area of the Southeast Sacramento Valley vernal pool region. Core recovery areas are identified by the Fish and Wildlife Service to focus recovery actions for 20 species of animals and plants that are listed as either Endangered or





Threatened. Statewide losses of vernal pools currently exceed 85 percent of historic distribution, and tens of thousands of acres of land supporting vernal pools and related ecosystems are threatened by numerous proposed developments in western Placer County and adjacent Sacramento County.

8

Mitigation Measure BIO-1a describes the conceptual mitigation plan to compensate for the loss of 24.81 acres of wetlands and other waters of the U.S. associated with the proposed project. The plan states that the applicants will purchase 7.88 acres of vernal pool credits from an off-site mitigation bank, and that 28.86 acres of riverine/seasonal wetlands will be constructed on the project site within the 257 acres of open space along the two drainage corridors. Consistent with the 2008 Federal Mitigation Rule (40 CFR Part 230, Subpart J), EPA supports the portion of the proposal that utilizes existing mitigation bank credits. However, the conceptual plan does not provide enough information to justify the out-of-kind, permittee-responsible portion of the mitigation proposed. As it appears multiple banks have service areas that include this project site, with available vernal pool and seasonal wetland credits, EPA believes this should be the Corps' preferred approach to approved mitigation for this project. We would also welcome the opportunity to provide input to the Corps' analysis of before/after mitigation implementation (BAMI) procedures under the mitigation ratio Standard Operating Procedures (SOP).

We note that an off-site permittee-responsible project could be appropriate, if it would support a watershed approach to aquatic resource management (such as contributing to existing regional conservation plans), and "will restore an outstanding resource based on a rigorous scientific and technical analysis" (40 CFR 230.93(b)(2)). The conceptual plan lacks any such analysis, but clearly does not propose to restore an outstanding resource. According to the plan, 28.86 acres of constructed wetlands will be located on terraces adjacent to existing stream channels. These wetlands "are designed to be inundated during frequent storm events" and will accommodate post-development flows from the surrounding developments. We do not support replacing naturally occurring wetlands with constructed stormwater treatment wetlands. While we agree that these riverine wetlands can improve water quality and may support wildlife, we do not believe they are appropriate compensation for the loss of depressional wetlands such as vernal pools, seasonal wetlands and seasonal swales.

Recommendations:

The Corps should not permit the project as proposed and should work with the EPA during development and identification of the LEDPA and mitigation planning.

The Final EIS should identify the Environmentally Preferable Alternative as well as the LEDPA, and explain the basis for these designations.

The Final EIS should include a revised mitigation plan that requires purchase of seasonal wetland and vernal pool credits from approved mitigation banks rather than giving compensatory mitigation credit for the on-site, out-of-kind constructed stormwater treatment wetlands proposed for this project.

o If sufficient bank credits are not available, EPA recommends that the Corps only approve off-site permittee-responsible mitigation at sites selected using a watershed approach to restoration of ecosystem functions and services, and where activities are likely to be successful and naturally self-sustaining.

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¹ Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon" (US Fish and Wildlife Service 2005).

- o To the extent practicable, the form of all off-site mitigation should be in-kind rehabilitation and re-establishment rather than creation or preservation.
- EPA is available to provide technical assistance in scaling appropriate mitigation needs pursuant to the Corps SOPs. Please contact Eric Raffini, EPA Wetlands Office, at (415) 972-3544 or raffini.eric@epa.gov, to continue discussion of the LEDPA and mitigation plan.

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Cumulative Impacts

EPA has serious concerns regarding the significant cumulative impacts to water quality and habitat (see Enclosure 3) and air quality (see Air Quality comments below) within the Sierra Vista cumulative effects study area. Tens of thousands of acres of land supporting vernal pools and related ecosystems are threatened by numerous proposed developments in western Placer County and adjacent Sacramento County. The Sierra Vista Specific Plan and other proposed development projects could potentially adversely affect 50 percent of the remaining vernal pool complexes in western Placer County. The project site is also located in an area that is federally designated non-attainment for ozone and PM2.5 (particulate matter smaller than 2.5 microns). These air pollutants can lead to a number of health problems. Children, in particular, have greater sensitivities to various environmental contaminants, including air pollutants. Construction and operation emissions could exacerbate existing conditions, such as asthma, for children, the elderly, and those with existing respiratory or cardiac disease.

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While Chapter 4 of the Draft EIS identifies numerous planned development, transportation, and infrastructure improvement projects in the Sierra Vista cumulative effects study area, EPA is aware of many additional federal projects in which the Corps is involved and which are planned in the study area for the same general time period as the proposed Sierra Vista project. These projects, however, have not been identified in the Draft EIS (section 4.2.4). They include the Sun Creek Specific Plan, Sunridge Specific Plan, Mather Specific Plan, Folsom South of US Highway 50 Specific Plan, Rio Del Oro Project, Arboretum Project, Southport Sacramento River Early Implementation Project, Cordova Hills Project, Jackson Township Project, Folsom Dam Modification Project Approach Channel, and the Natomas Levee Improvement projects. It is unclear whether these projects have been considered in the Sierra Vista Specific Plan cumulative impacts analyses.

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Recommendation: Additional efforts should be made by the Corps to coordinate with appropriate agencies and applicants on the multiple projects in the area so that the cumulative effects of past, current, and foreseeable future projects can be more accurately identified, and minimized and/or effectively mitigated for each resource.

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Air Quality

Table 3.3-12 (Draft EIS, p. 3.3-37) refers to the State Implementation Plan (SIP) emissions budget for volatile organic compounds (VOC), which are ozone precursors. EPA, however, has only partially approved the 2008 Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2008 Ozone Plan), specifically the motor vehicle emissions budget for use in traffic conformity determinations. Therefore, it is not the applicable SIP for general conformity, and a general conformity determination for the Sierra Vista project cannot be

made based on this plan at this time. Based on the proposed project's potential construction emissions estimates in the Draft EIS, it appears that a conformity determination will be needed.

Recommendation: The Final EIS should demonstrate that the direct and indirect emissions of the project conform to the SIP and do not cause or contribute to violations of the National Ambient Air Quality Standards (NAAQS). We recommend that the Corps work closely with the Placer County Air Pollution Control District on its conformity determination. We also recommend that the Draft General Conformity Determination be included in the Final EIS, either as a detailed summary or as an appendix.

The Draft EIS provides construction and operational emissions estimates in pounds per day for purposes of comparing them with emissions budgets and general conformity de minimis thresholds. It appears that, with the exception of carbon monoxide, the proposed project's direct and indirect contaminant emissions have not been modeled to show their estimated concentrations in the project area. Additional dispersion modeling should be conducted to determine air pollutant concentrations of criteria pollutants from direct, indirect, and cumulative emissions for an accurate comparison with the NAAQS, using comparable units (e.g. micrograms per cubic meter, parts per billion, or parts per million).

Recommendation: The Final EIS should include this additional information.

EPA is concerned that the proposed action would result in a significant cumulative impact due to operational emissions (Draft EIS, p. 4.0-27). According to the Draft EIS (p. 4.0-4), the study area for cumulative air quality impacts is the Sacramento Valley Air Basin. As stated above, EPA is aware of multiple federal projects, in which the Corps is involved, and which are planned in the Sacramento Valley Air Basin for the same general time period as the proposed Sierra Vista project. Because many of these projects are not identified in the discussion in section 4.2.4 of the Draft EIS, however, it is unclear whether they have been considered in the cumulative air quality impacts analysis.

Recommendation: Cumulative emissions should be evaluated for potential contributions to violations of the NAAQS. The air quality cumulative impacts analysis should account for all reasonably foreseeable future actions in the Sacramento Valley Air Basin. The Final EIS should provide a table that includes the criteria pollutant emissions estimates and totals from all of these sources for both the construction and operational phases of the projects.

The Draft EIS (p. 3.3-35) cites the general conformity rule incorrectly. The general conformity rule was revised April 5, 2010 (75 FR 17257). The EPA deleted the provision in 40 CFR 93.153 that required Federal agencies to conduct a conformity determination for regionally significant actions where the direct and indirect emissions of any pollutant represent 10 percent or more of a nonattainment or maintenance area's emissions inventory for that pollutant.

Recommendation: This language should be deleted from the EIS.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX 75 Hawthorne Street San Francisco, CA 94105-3901

APR 2 8 2008

Colonel Thomas C. Chapman District Engineer, Sacramento District U.S. Army Corps of Engineers 1325 J Street, 14th floor Sacramento CA, 95814-2922

Subject:

Sierra Vista Specific Plan (PN 200601050), Placer County, California

Dear Colonel Chapman:

We have reviewed the public notice (PN 200601050) of March 28, 2008, regarding an application for a Department of the Army permit and Notice of Intent to prepare an Environmental Impact Statement (EIS) for the proposed Sierra Vista Specific Plan (SVSP) in Placer County, California. EPA supports the efforts of the partners involved in this project area to produce a unified approach through this single PN and the subsequent EIS. We believe this approach will facilitate consideration of cumulative effects and identification of appropriate avoidance and mitigation needs. We are providing the attached comments under the authority of, and in accordance with, the provisions of the Federal Guidelines promulgated under Section 404(b)(1) of the Clean Water Act (CWA) at 40 CFR 230 (the Guidelines).

According to the PN, the proposed SVSP is a mixed-use master planned community with residential, commercial, open space, and recreational land uses. The proposed 2,138 acre project site is located within the sphere of influence and directly adjacent to the urban boundary of the City of Roseville in an unincorporated portion of south western Placer County. At full build-out, the SVSP is expected to provide approximately 10,000 residential units in a "mixed-use, mixed-density master planned community with residential, commercial, office, public/quasi-public parks, and open space land uses, including two regional community centers."

There are approximately 51.87 acres of waters of the US within the project site, including portions of Curry Creek, wetlands, and vernal pools. The applicants propose to fill approximately 37.74 acres of these interconnected waters. Figure 4 of the PN illustrates varying degrees of avoidance of aquatic resources, but provides insufficient information to inform a detailed analysis of each individual site.

Vernal pool complexes, comprised of interconnected pools, wetlands and other waters are high value aquatic resources that provide habitat for federally threatened and endangered species. Some of the species that vernal pool complexes support occur only in California. High rates of biodiversity and endemism within vernal pool ecosystems and the large-scale destruction and

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degradation of these ecosystems have increased the importance of the vernal pools and interconnected aquatic resources that remain. Statewide, as much as 85% of the original distribution of vernal pool complexes has been lost to development, and up to 33% of the crustacean species that are endemic to vernal pool habitat (e.g., fairy shrimp) may have already become extinct due to habitat destruction. Between 1994 and 1997 Placer County lost approximately 500 acres of vernal pools per year, and the County's continuing high rate of development threatens remaining vernal pool complexes. Due to the high ecological value and increasing rarity of these systems, EPA considers these vernal pool complexes to be aquatic resources of national importance (ARNI).

Based on information provided in the PN, it does not appear that the proposed project complies with the Guidelines' requirements for avoidance and minimization (40 CFR 230.10). Generally, the Guidelines limit issuing permits to only those projects that avoid waters to the maximum extent practicable. Regulated waters cover approximately 2.4% of the project site; however, the applicants' propose to permanently impact over 72% of the aquatic resources in the project area. Given the low percentage of waters on-site and the high percentage of proposed fill to these waters, it seems likely that more can be done to avoid direct discharges of fill material to waters. EPA believes that project alternatives having fewer impacts to aquatic resources are available and viable and should be examined in the EIS. The PN indicates that the applicants' propose to place four parcels into open space, largely along Carson Creek and its tributaries and under a power line right of way. Although aquatic resources are distributed widely across the site, it seems reasonable that a practicable project alternative can be developed to avoid considerably more than 14.13 acres of the 51.87 acres of onsite waters of the US.

Staff from EPA and the Army Corps of Engineers met monthly with the City of Roseville, staff from natural resource agencies, and individuals representing the project since March 2007 to discuss the SVSP's potential impacts and conflicts. EPA supports the efforts of the Army Corps of Engineers and applicants to consolidate the analysis of projects having the same infrastructure needs into one Environmental Impact Statement for purposes of fulfilling NEPA requirements and providing a base of information to support a CWA Individual Permit action. We communicated our concern regarding a lack of avoidance and compliance with the Guidelines early in the process. The value of on-site aquatic resources and the potential for further avoidance of impacts to these resources support the use of CWA regulatory tools to ensure compliance with the Guidelines. We also recommend that the applicants' coordinate closely with Placer County officials to bring their project into alignment with ongoing development of the Placer County Conservation Plan. We look forward to working collaboratively with the applicants' and the Corps through the NEPA and CWA process to reduce project impacts to a level that would make the project comply with these two acts. There will be additional comments regarding the Scope of the EIS following this letter.

At this time, however, the EPA finds that this project, as currently proposed, may have substantial and unacceptable impacts to aquatic resources of national importance. Direct project

King, J. L. (1996). Loss of Diversity as a Consequence of Habitat Destruction in California Vernal Pools. Ecology, Conservation, and Management of Vernal Pool Ecosystems, Sacramento, California Native Plant Society.
 CDFG (1998) Changes in Great Valley Vernal Pool Distribution from 1989 to 1997. Report to CDFG, Author Robert F. Holland. http://www.dfg.ca.gov/whdab/wetlands/vp_holland/report_index.htm.

impacts to vernal pools and interconnected aquatic resources would reduce the site's abundance and diversity of native habitat, terrestrial wildlife, and aquatic species and would contribute to the cumulative losses of vernal pools which currently exceed 85% of historic distribution. The magnitude of proposed fill to these valuable resources is unacceptable considering that jurisdictional waters cover such a small percentage of the project site. Therefore, we recommend denial of the project, as currently proposed. This letter follows the field level procedures outlined in the August 1992 Memorandum of Agreement (MOA) between the Environmental Protection Agency and the Department of the Army, Part IV, paragraph 3(a) regarding Section 404(q) of the Clean Water Act.

We look forward to working with your staff and the applicant to resolve the important environmental issues surrounding the proposed project. If you wish to discuss this matter further, please call me at (415) 972-3572 or David Smith, supervisor of the Wetlands Regulatory Office, at (415) 972-3464.

Sincerely,

Alexis Strauss, Director

cc: Ms. Nancy Haley

U.S. Army Corps of Engineers Sacramento District

1325 J Street, 14th floor

Sacramento, California 95814-2922

Mr. Patrick Gillum

Central Valley Regional Water Quality Control Board

11020 Sun Center Drive #200

Rancho Cordova, CA 95670-6114

Mr. Ken Sanchez

U.S. Fish and Wildlife Service

2800 Cottage Way, Room W2605

Sacramento, CA 95825-1888

Mr. Jeff Finn

California Department of Fish and Game Sacramento Valley - Central Sierra Region

1701 Nimbus Road, Suite A

Rancho Cordova, CA 95670

Mr. John Baker
National Marine Fisheries Service
650 Capitol Mall, Suite 8-300
Sacramento, CA 95814-4708
Mr. Michael Johnson, Planning Director
Placer County Planning Department
3091 County Center Drive
Auburn, CA 95603

Detailed EPA Comments PN 200601050 for the proposed Sierra Vista Project

I. Project Site

The PN 200601050 describes SVSP as a mixed-use master planned community with residential, commercial, open space, and recreational land uses. Participating landowners make up the vast majority of the 2,138-acre SVSP site. The proposed project is located in the southwest portion of unincorporated Placer County, directly adjacent to the City of Roseville and within the Roseville sphere of influence. Currently, SVSP plans to provide approximately 10,000 residential units.

II. Elevation of Individual Permit Decisions under CWA 404(q) MOA

Pursuant to the 1992 Memorandum of Agreement between the Environmental Protection Agency (EPA) and the Department of the Army per Clean Water Act ("CWA") Section 404(q), it appears that authorization of the proposed project may result in unacceptable adverse effects to aquatic resources of national importance (ARNIs). The wetlands in question are considered special aquatic sites under the Guidelines, and the vernal pool complexes on the project site support a diversity of unique plants and animals.

Aquatic Resources of National Importance

Placer County lies within the California Floristic Province, a "biodiversity hotspot" recognized internationally for its high levels of species endemism, in part due to the presence of vernal pools and associated aquatic resources. Statewide, as much as 85% of vernal pools have been lost to development, and up to 33% of the original crustacean species that depend upon vernal pool habitat (e.g., fairy shrimp) may have already become extinct due to habitat destruction. The mosaic of aquatic and terrestrial habitats on the project site are potential habitat for State and federally-listed species such as vernal pool fairy shrimp, vernal pool tadpole shrimp, northwestern pond turtle, Swainson's hawk, burrowing owl, prairie falcon, golden eagle, and tricolored blackbird. The high rates of endemism within vernal pool ecosystems and the large-scale destruction and degradation of these ecosystems have increased the importance of the landscapes that remain. Between 1994 and 1997 Placer County lost approximately 500 acres of vernal pools per year, and it appears this vigorous pattern of loss has continued as Placer is one of California's fastest growing counties.

³ http://www.biodiversityhotspots.org/xp/Hotspots/hotspotsScience/hotspots_defined.xml and http://www.biodiversityhotspots.org/xp/Hotspots/california_floristic/

⁴ King, J. L. (1996). Loss of Diversity as a Consequence of Habitat Destruction in California Vernal Pools. Ecology, Conservation, and Management of Vernal Pool Ecosystems, Sacramento, California Native Plant Society.

⁵ Placer Vineyards Specific Plan Revised Draft Environmental Impact Report. March 2006. Section 4, pages 4.4-11 through 4.4-14. http://www.placer.ca.gov/CommunityDevelopment/EnvCoordSvcs/PVineyards.aspx

⁶CDFG (1998) Changes in Great Valley Vernal Pool Distribution from 1989 to 1997. Report to CDFG, Author Robert F. Holland. http://www.dfg.ca.gov/whdab/wetlands/vp_holland/report_index.htm.

The SVSP site is a relatively large and intact mosaic of vernal pool and grassland habitat. According to the PN, the site is characterized by integrated waters and wetlands including approximately 11.64 acres of vernal pools, 9.19 acres of seasonal wetlands, 19.65 acres of wetland swale, 2.63 acres of pond, 2.36 acres of perennial streams, 6.02 acres of intermittent streams, and 0.38 acres of ephemeral streams. The primary aquatic features that comprise vernal pool complexes (vernal pools, seasonal wetlands, and seasonal wetland swales) account for approximately 78% of the on-site waters, while linear features, associated wetlands, and ponds make up the remainder.

The US Fish and Wildlife Service (FWS) designated all of the land on the SVSP site as core recovery habitat for vernal pool fairy shrimp⁷, which is a strong indication of the importance of this site to the maintenance of listed vernal pool species. Core areas are the specific sites the FWS considers necessary to recover endangered or threatened species and should be the initial focus of protection measures such as preservation. The vernal pool habitat on the SVSP site is occupied by vernal pool fairy shrimp. Preservation of habitat occupied by vernal pool fairy shrimp is a primary element of the FWS recovery strategy because vernal pool species are primarily threatened with extinction due to habitat loss and fragmentation. The vernal pools complexes on the SVSP site appear to serve an important role in the recovery of the endangered vernal pool fairy shrimp for US FWS.

This area of Placer County has a limited supply of opportunities for vernal pool compensatory mitigation and is considered an important part of a large-scale conservation plan for Placer County's aquatic and natural resources. If current efforts focused on protecting aquatic resources at the regional level are to succeed, avoidance of aquatic resources in a conservation strategy that provides for the long-term viability of aquatic resources is vital.

Substantial and Unacceptable Impacts

The proposed project impacts to vernal pools and integrated aquatic features are substantial and unacceptable based on the magnitude of fill, lack of sufficient avoidance, historical losses of these wetland types in the area, habitat fragmentation, and inadequate compensation opportunities. Project construction will result in the permanent loss of approximately 37.74 acres of waters and wetlands. The current proposal includes filling approximately 72.8% of all on-site waters including a high percentage of the vernal pools on the property. Similar to other types of wetlands and streams, vernal pools are dependent on interconnected water sources and immediately adjacent upland areas to function as wetlands and retain value as aquatic habitat. The filling of these aquatic resources:

 permanently destroys habitat for aquatic species and wildlife including endangered and special status species,

causes a potentially irreversible loss of biodiversity, ecosystem stability, and valuable aquatic resources (see section on Significant Degradation), and

• may lead to decreased floodwater retention, increased sediment transport and runoff.

⁷ US Fish and Wildlife Service (2005) Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon.

In addition, many of the seasonal wetlands and streams proposed for direct fill may impact avoided pools by altering the sediment and water supply through increasing impervious surfaces and burying streams into pipe culverts. The proposal to forego avoidance and fill almost 73% of on-site aquatic resources is unacceptable given that all or nearly all the waters could be avoided by realigning the planned open space.

Perhaps the most compelling reason the proposed impacts are both substantial and unacceptable, is the importance of the habitat on the SVSP site to the recovery of aquatic endangered species. The Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon lists habitat fragmentation as the single largest threat to the survival and recovery of listed species addressed in the Recovery Plan. The SVSP proposes to destroy most of the 11.64 acres of vernal pools and fragment an approximately 2000-acre landscape of vernal pool complexes. Figure 1 shows proposed development in western Placer County and the distribution of vernal pool core Recovery Areas identified by FWS. FWS recommends preserving 85% of the core areas identified in western Placer County, and the applicants have been unable to propose offsetting project impacts to aquatic habitat for endangered species by compensating within the core area. EPA has identified two other projects shown in Figure 1, Placer Vineyards and Lincoln 270, as candidates for elevation through the 404(q) process for similar reasons.

III. Clean Water Act Compliance

The purpose of the Section 404(b)(1) Guidelines is to restore and maintain the chemical, physical, and biological integrity of waters of the United States. These goals are achieved, in part, by prohibiting discharges of dredged or fill material that would result in avoidable or significant adverse impacts on the aquatic environment. The burden to demonstrate compliance with the guidelines rests with the permit applicant. The Guidelines contain four main requirements each of which must be complied with to obtain a Section 404 permit:

- 1. Section 230.10(a) prohibits a discharge if there is a less environmentally damaging practicable alternative to the proposed project. These alternatives are presumed for non-water dependent activities in special aquatic sites.
- 2. Section 230.10(b) prohibits discharges that will result in a violation of the water quality standards or toxic effluent standards, jeopardize a threatened or endangered species, or violate requirements imposed to protect a marine sanctuary.
- Section 230.10(c) prohibits discharges that will cause or contribute to significant degradation of the waters of the United States. Significant degradation may include individual or cumulative impacts to human health and welfare; fish and wildlife; ecosystem diversity, productivity and stability; and recreational, aesthetic or economic values.

7

 Section 230.10(d) prohibits discharges unless all appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem.

The applicant proposes to fill wetlands and vernal pools, aquatic resources considered special aquatic sites which are afforded a higher level of protection by CWA regulations. The Guidelines consider the degradation or destruction of special aquatic sites to be among the most severe environmental impacts that cause a potentially irreversible loss of valuable aquatic resources (40 CFR 230.1(d)).

Alternatives Analysis-40 CFR 230.10(a)

Compliance with the Guidelines requires the applicant to clearly demonstrate that the "preferred" alternative is the Least Environmentally Damaging Practicable Alternative (LEDPA) that achieves the overall project purpose. In addition, the Guidelines presume the existence of project alternatives that do not include discharges of fill material to special aquatic sites when the project is not water dependent (40CFR230.10(a)(3)).

Alternatives

The applicants have been evaluating alternatives with input from natural resource agencies. Information describing these alternatives will be provided to the Corps in order to complete the CWA and NEPA processes. We provide the following guidance to support the evaluation of onsite and off-site alternatives. Identification of the LEDPA is achieved by performing an alternatives analysis that estimates the direct, secondary, and cumulative impacts to jurisdictional waters resulting from a set of on- and off-site project alternatives. As the project purpose ("large-scale, mixed-use, mixed-density master planned community") is not water-dependent, the applicant bears the burden of proof to rebut the Guidelines presumption that alternatives are available and capable of being done that do not include discharging dredged or fill material to special aquatic sites. The alternatives analysis should evaluate alternatives that fully avoid fill, avoid placement of fill in the vernal pool complexes on the western portion of the site, and provide for conservation consistent with the conservation footprint options being considered in the PCCP process. An evaluation of the long-term viability of avoided resources in onsite preserve designs for various alternatives can inform the LEDPA determination.

The analysis of project impacts should be commensurate with the magnitude of impacts to aquatic resources. Fewer impacts to aquatic resources require a less comprehensive alternatives analysis. Greater consideration should be given to onsite alternatives that optimize avoidance of aquatic resources. This project clearly rises to the threshold of significant impacts; therefore, the applicants need to perform, and the Corps should analyze carefully, an exhaustive alternatives analysis.

Impact Assessment

The alternatives analysis must evaluate direct, secondary⁸, and cumulative⁹ impacts for onsite and offsite alternatives for the proposed project. Secondary effects include: (1) changes in the hydrology and sediment transport capacity of Curry Creek and associated tributaries resulting from filling tributaries and wetlands; (2) increases in impervious surfaces and the corresponding increases in the volume and velocity of polluted stormwater; (3) decreases in water quality from the impairment of ecosystem services such as water filtration, groundwater recharge, and the attenuation of floods; (4) disruption of hydrological and ecological connectivity between aquatic resources filled, altered, or degraded on-site and off-site wetlands and vernal pools; and (5) decreases in biodiversity and ecosystem stability.

Cumulative impacts include past, present, and reasonably foreseeable direct and secondary impacts to the aquatic environment. Historical impacts on aquatic ecosystems include California's rapid population growth and resulting losses of approximately 95% of the State's wetlands of and up to 85% of the vernal pools. Tens of thousands of acres of land supporting vernal pools and related ecosystems are threatened by numerous proposed developments in western Placer County. SVSP and other proposed development areas potentially impact 50% of the remaining vernal pool complexes in western Placer County. Pending and reasonably foreseeable projects include, but are not limited to, the Placer Parkway, Creekview Specific Plan, Placer Vineyards Specific Plan, Placer Ranch Specific Plan, Brookfield Property, Regional University, Curry Creek Community Plan, and any development associated with the City of Roseville Retention Basin. Figure 1 illustrates the intense development pressure in western Placer County and indicates a strong potential for cumulative adverse impacts to intact vernal pool landscapes.

LEDPA

As stated in the cover letter, the proposed project does not appear to be the LEDPA due to the lack of avoidance of aquatic resources and the magnitude of proposed fill.

Significant Degradation - 40 CFR 230.10(c)

The Guidelines prohibit granting a permit for a project that causes or contributes to significant degradation of aquatic resources. Effects contributing to significant degradation include significantly adverse effects resulting from the discharge of fill material into regulated waters such as: (1) loss of fish and wildlife habitat (40 CFR 230.10(c)(3)), (2) reduction of biological productivity caused by smothering wetland habitat (40 CFR 230.41), and (3) impairment or destruction of endangered species habitat (40 CFR 230.30(2)).

Washington, D.C.

11 GIS data collected by Placer County.

Secondary effects are defined by the Guidelines as effects on an aquatic ecosystem that are associated with a discharge of dredge or fill materials but do not result from the actual placement of the dredged or fill material (40 CFR 230.11(h)).

Cumulative effects are defined by the Guidelines as changes in an aquatic ecosystem that are attributable to the collective effect of a number of individual discharges of dredged or fill material (40 CFR 230.11(g)).
 Dahl, T.E. 1990. Wetland losses in the United States 1780's to 1980's. U.S. Fish and Wildlife Service,

SVSP may cause or contribute to significant degradation of on site aquatic resources because discharging fill material into approximately 38 acres¹² of special aquatic sites will smother and kill aquatic life, permanently destroy habitat for wildlife dependent on these aquatic features, and subsequently reduce onsite ecosystem diversity, productivity, and stability. The proposed fill will destroy habitat for wildlife dependent on the onsite aquatic resources. Vernal pool complexes in the SVSP area are considered important concentration areas for waterfowl and shorebirds using the Pacific Flyway.

Vernal pools and their associated aquatic features support some of the most biologically diverse aquatic ecosystems in California and the United States. ¹³ The vernal pools on the SVSP site are located within the core recovery area for the vernal pool fairy shrimp (*Branchinecta lynchi*) and considered to be critical habitat for preservation by FWS. Destroying vernal pools, integrated aquatic resources, and associated upland habitat represents a potentially irreversible loss of core area preservation, biodiversity and valuable aquatic resources (40 CFR 230.1(d)), is considered a significant adverse effect by the Guidelines (40 CFR 230.41), and therefore may cause or contribute to significant degradation. Similarly, the mosaic of aquatic and terrestrial habitats on the project site are potential habitat for state special status species such as Northwestern pond turtle, Swainson's Hawk, burrowing owl, prairie falcon, golden eagle, and tri-colored blackbird. ¹⁴ Destruction of these habitat resources for endangered and threatened species would be considered significantly adverse by the Guidelines and therefore may cause or contribute to significant degradation.

Minimization-40 CFR 230.10(d)

Failure to adequately offset project impacts is grounds for denial of the permit application, and it is not clear the applicants are able to compensate for proposed project impacts. The applicants have not been able to identify lands within the vernal pool core recovery area for compensation even though the entire project and impact site is within the core recovery area. CWA regulations and guidance require all appropriate and practicable steps be taken to avoid and minimize direct impacts to aquatic resources and to compensate for unavoidable discharges of dredged or fill material into waters (40 CFR 230.10(d)).

Specifically, it is important to: (1) increase the proposed avoidance and minimization; (2) document that the remaining proposed impacts are unavoidable; and (3) provide a compensatory mitigation plan for review consistent with the recently issued rule on Compensatory Mitigation for Losses of Aquatic Resources¹⁵. There are numerous challenges to compensating for impacts to the functions and values provided by vernal pools in western Placer County. For example, CALTRANS and private developers have reported a shortage of available compensatory mitigation opportunities in Placer County to compensate for the unavoidable impacts of pending

 $^{^{12}}$ Estimated from information provided in the CWA 404 permit application.

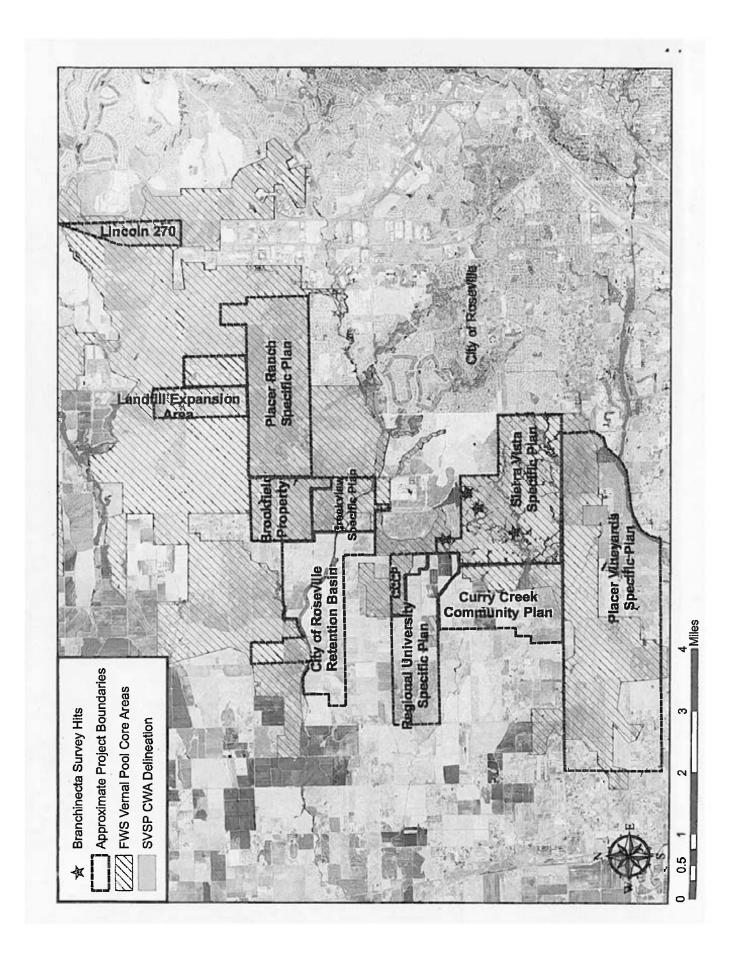
¹³ http://www.biodiversityhotspots.org/xp/Hotspots/hotspotsScience/hotspots defined.xml and http://www.biodiversityhotspots.org/xp/Hotspots/california_floristic/

http://www.biodiversityhotspots.org/xp/Hotspots/california_floristic/ 14 Placer Vineyards Specific Plan Revised Draft Environmental Impact Report. March 2006. Section 4, pages 4.4-11 – 4.4-14. http://www.placer.ca.gov/CommunityDevelopment/EnvCoordSvcs/PVineyards.aspx

http://www.epa.gov/owow/wetlands/pdf/wetlands mitigation final rule 4 10 08.pdf

projects. Mitigation opportunities in nearby counties are also constrained. Mitigation sequencing is now to be performed according the new rules, which stipulate the use of approved mitigation banks or in-lieu fee programs, or citing mitigation according to approved watershed plans. Should those prove to be not practicable, then permittee-responsible mitigation could be used to address unavoidable project impacts. In any case, permit applicants must take all appropriate and practicable steps to avoid and minimize impacts to special aquatic sites and other jurisdictional waters to reduce the need for compensatory mitigation.

As the applicants make progress avoiding and minimizing impacts, the need for specific information about proposed compensatory mitigation sites becomes increasingly important. Specific information includes delineations of waters of the US, proposed long-term management plans, proposed third-party management entity with documented capability, estimated endowment, and proposed easement language for protection of the resources in perpetuity. For example, we would not consider lands proposed for 1:1 open space mitigation as compensation for impacts to aquatic resources without first knowing the amount and type of delineated waters onsite and any proposed plans for creation, restoration, or enhancement. Uplands contained within the proposed open space mitigation site are not appropriate compensation for impacts to waters. Indeed all of these details will need to be analyzed through the development of the EIS for this project and associated alternatives analysis and compensatory mitigation plans.



Letter B: U.S. Environmental Protection Agency, Enrique Manzanilla, Director, dated September 4, 2012

Response B-1

The U.S. Environmental Protection Agency's (USEPA's) comment that the Proposed Action does not appear to be the least environmentally damaging practical alternative (LEDPA) and concern about the adequacy of the mitigation put forth by the Applicants is noted. The Draft EIS presents the environmental impacts of the Proposed Action and a range of reasonable alternatives but does not identify the LEDPA as the identification of the LEDPA is not required in the National Environmental Policy Act (NEPA) document. The Applicants have prepared and submitted a Section 404(b)(1) Alternatives Analysis, **Appendix A**, to meet their obligation of proving that the Proposed Action is the LEDPA. The U.S. Army Corps of Engineers (USACE) will review the Applicants' Section 404(b) alternatives analysis as well as conduct its own analysis of the Proposed Action and the EIS alternatives using the criteria for practicability under CWA Section 404, and will identify the LEDPA in the USACE's 404(b)(1) analysis and its Record of Decision (ROD).

Response B-2

Please see **Response B-1** above which explains why the Draft EIS or the Final EIS does not identify the LEDPA. Under NEPA, the environmentally preferable alternative does not need to be identified until the ROD is issued; therefore, it is not identified in this Final EIS. The ROD will address the decision, alternatives considered, the environmentally preferable alternative, relevant factors considered in the decision, and mitigation and monitoring.

Concerning the USEPA's request to coordinate on identification of the LEDPA, the USACE is committed to meeting its obligations under the 1992 MOA between USEPA and USACE including coordination on the LEDPA determination.

Response B-3

USEPA expresses concern about the Proposed Action's cumulative effects on air quality, given the fact that the area is non-attainment for ozone and fine particulate matter (PM2.5) and a substantial amount of new development is anticipated in the air basin. The Draft EIS and the Final EIS evaluate and disclose both the project-level and the cumulative air quality impacts of the Proposed Action and alternatives. Additional information has been added to the analysis of cumulative air quality impacts. The revised text is shown in **Chapter 3.0**, **Errata**. Responses to the USEPA's specific comments related to air quality that are in Enclosure 2 are presented below.

Response B-4

The comment is noted.

Response B-5

As stated above in **Response B-1**, the Draft EIS and Final EIS do not identify the LEDPA as it is not required in a NEPA document. USEPA's support of Alternative 1 on account of its reduced impacts is noted.

Response B-6

USEPA's comment that the project would have significant impacts on a site that is identified as an Aquatic Resource of National Importance (ARNI) is noted.

Response B-7

The USACE will comply with the Section 404 guidelines and will issue a permit only for a project that is determined to be the LEDPA. As noted above, the USACE has not completed its analysis of the proposed Action and alternatives relative to the practicability criteria.

Response B-8

USEPA's comment asserts that the majority of impacts will occur to depressional wetlands and implies that the proposed on-site mitigation would not mitigate for these impacts. In citing the types of wetlands impacted that are depressional, USEPA includes vernal pools, seasonal wetlands, and seasonal swales (swale wetlands). As noted in the Draft EIS, the vernal pool and seasonal wetland categories are depressional wetlands but as sloping wetlands, swales are not considered depressional.

As noted in Section 3.4, Biological Resources, in the Draft EIS, no federal or state listed plant species occur on the project site. Although dwarf downingia is known to occur on the site, the species is neither federally or state listed as a Threatened or Endangered species.

Conservancy fairy shrimp has not been observed on-site or on adjacent properties. Conservancy fairy shrimp has been found on only one occasion in only one location in western Placer County located approximately 9.6 miles away at the Mariner Conservation bank. Additionally, the type of vernal pools and depressional seasonal wetlands located within the project area are not consistent with the type of vernal pools associated with known locations of Conservancy fairy shrimp.

The Draft EIS acknowledges that the project site is located in the Placer County core area (Zone 2) identified by the U.S. Fish and Wildlife Service (USFWS) for the recovery of vernal pool crustaceans and the Proposed Action will result in the removal of 7.51 acres of aquatic habitat that is known to support listed crustaceans and about 13 acres of aquatic habitat that is suitable for the species but where the species were not observed. The Proposed Action's contribution to the cumulative impact on vernal pools and related ecosystems is analyzed in Chapter 4.0, Cumulative Impacts, of the Draft EIS.

Response B-9

As stated in the Preamble (Transition to the New Rule) to the 2008 Mitigation Rule:

"This final rule will apply to permit applications received after the effective date of these new rules, unless the District Engineer has made a written determination that applying these new rules to a particular project would result in a substantial hardship to a permit applicant."

"Permit applications received prior to the effective date will be processed in accordance with the previous compensatory mitigation guidance."

The applications for the Sierra Vista Specific Plan project were submitted to the USACE in September, 2006. The effective date for the 2008 Mitigation Rule was June 9, 2008. As such, the Sierra Vista Specific Plan applications are clearly not subject to the 2008 Mitigation Rule. The rules that apply to Sierra Vista Specific Plan project are those that existed prior to issuance of the mitigation rule. Those rules set forth a clear preference for on-site mitigation over off-site mitigation and do not state any clear preference for mitigation banks over permittee-responsible mitigation.

The proposed conceptual mitigation plan is generally consistent with the mitigation guidelines that existed prior to the 2008 Mitigation Rule. USEPA's comment asserts that the on-site mitigation proposed by the Applicants is "out of kind" and implies that purchase of constructed seasonal wetland credits from an approved mitigation bank would constitute "in-kind" mitigation. In-kind mitigation is defined to mean "a resource of similar structural and functional type to the impacted resource." Out-of-kind mitigation is defined to mean "a resource of different structural and functional type from the impacted resource." The Applicants propose to mitigate for all direct impacts to vernal pools, both within and outside watersheds where listed branchiopods have been detected, through the purchase of constructed vernal pool mitigation credits. Impacts to depressional seasonal wetlands located in watersheds where listed branchiopod occurrence was detected would also be mitigated through the purchase of constructed vernal pool mitigation credits. USACE finds this, conceptually, to be in-kind mitigation, but reserves the final determination to the evaluation of a final mitigation plan.

The Applicants propose to mitigate for impacts to depressional seasonal wetlands within watersheds where listed branchiopods were not detected with on-site establishment of depressional seasonal wetlands. Conceptually, the USACE finds that this is in-kind mitigation, but reserves its final determination to the evaluation of a final mitigation plan. The Applicants propose to mitigate for other waters (streams and ponds) through the on-site establishment of wetlands and enhancement of streams corridors. The USACE finds that this component is not in-kind mitigation.

Response B-10

USEPA refers to "off-site permittee-responsible" mitigation and the factors to be considered when evaluating such a proposal under 33 CFR 332.3, which as discussed above, does not apply in this case.

The USACE sees no reason to suspect that the wetlands proposed to be established on-site are for the purpose of treating or holding stormwater. The Applicants propose that all Low Impact Development

(LID) and stormwater treatment Best Management Practices (BMPs) (e.g., bio-swales, water quality treatment basins, etc.) will be located up-gradient of the constructed wetlands. While the bioswales and water quality treatment basins may develop wetland characteristics over time, they are not included in the acreage of wetlands that will be constructed on-site under the permittee-responsible mitigation.

Response B-11

USEPA recommends that the USACE work with the USEPA during development and identification of the LEDPA and mitigation planning. USACE agrees and will comply with its commitments under the 404(q) MOA.

Response B-12

As discussed above, under Response B-3, the Final EIS is not required to identify the LEDPA.

Response B-13

USEPA recommends that the Final EIS include a revised mitigation plan that requires purchase of seasonal wetland and vernal pool credits. This recommendation appears to be based on the 2008 Mitigation Rule, which as discussed above is not applicable in this case. Out of kind mitigation and stormwater treatment wetlands are discussed under **Responses B-9** and **B-10**, above.

Response B-14

The comment is noted.

Response B-15

USEPA's concern regarding the cumulative impact on water quality and habitat is noted. The cumulative effect of the Proposed Action in conjunction with the effects of other past, present and reasonably foreseeable future actions on vernal pool complexes in western Placer County were evaluated and reported in Chapter 4.0, Cumulative Effects, of the Draft EIS. The Draft EIS analysis presents graphics showing the losses of vernal pool grasslands that have occurred in the study area since the 1970s and also shows the projected losses that would occur through 2060 if the currently projected urban development occurs. It also reports the cumulative filling of wetlands that occurred in the study area between 1990 and 2010 and the projected future losses that would result if the reasonably foreseeable projects subject to the USACE regulatory program are approved as proposed. Furthermore, all of the USEPA comments in response to the Public Notice for the Sierra Vista Project (Enclosure 3) were considered by the USACE during the preparation of the Draft EIS. Comments that relate to CWA Section 404(b)(1) will be considered during the permit process.

Response B-16

The USEPA's concern regarding the cumulative impact of the Proposed Action on air quality is noted. The Draft EIS acknowledges that the Proposed Action would result in increased emissions of pollutants for which the local air basin has been designated a non-attainment area. The Draft EIS finds both the individual and cumulative air quality effects of the Proposed Action significant.

Response B-17

Draft EIS page 4.0-3 presents the approach used to define the study area for cumulative impacts on biological resources. As explained there, the study area was delineated to encompass all of western Placer County, the adjoining northerly portion of Sacramento County, and the westerly portion of Sutter County. The local jurisdictions within the delineated study area were contacted to develop a list of foreseeable future projects. All of the projects that were identified are listed in the Draft EIS. As two projects in Lincoln were inadvertently left out, the cumulative project list has been expanded to include the Lincoln 270 Project and the Village 7 Specific Plan Project. This revision has been incorporated into Chapter 4.0 Cumulative Impacts in the Draft EIS and is detailed in **Chapter 3.0**, **Errata**, in this Final EIS. The remaining projects that are named by the USEPA in its comment fall outside of the study area for biological resources and therefore were not considered in the cumulative impact assessment for biological resource impacts.

Draft EIS pages 4.0-3 and 4.0-4 present the manner in which the cumulative study area was defined for each of other resource topics, including visual resources, farmland, air quality, cultural resources, hydrology, noise, and utilities. As noted on page 4.0-4, the study area for cumulative air quality impacts is the Sacramento Valley Air Basin (SVAB) which encompasses nine counties in full and portions of Placer and Solano counties. The projects named by the USEPA in this comment fall within the SVAB and are therefore considered in the cumulative air quality impact assessment. Also see **Response B-20**, below.

Response B-18

In response to the USEPA's comment concerning the status of the current SIP, the USACE reexamined the conformity analysis in the Draft EIS and determined, based on the General Conformity Rule, that conformity analysis only applies to activities that are directly associated with the need for NEPA review. Where the federal action is a permit, license, or other approval for some aspect of a nonfederal undertaking, the relevant activity is the part, portion, or phase of the nonfederal undertaking that requires the federal permit, license, or approval. The USACE permit action is limited to filling of the waters of the U.S. on the project site, and does not extend to other construction activities, nor will the USACE maintain control over those elements of the Proposed Action or alternatives that are associated with operation of facilities constructed under the Sierra Vista Specific Plan. Accordingly, the conformity

As stated in 40 CFR Parts 6, 51, and 93 (FRL-4805-1), Determining Conformity of General Federal Actions to State or Federal Implementation Plans, the definition of "federal action" is revised by adding the following sentence to the end of the definition in the proposal: Where the federal action is a permit, license, or other approval for some aspect of a nonfederal undertaking, the relevant activity is the part, portion, or phase of the nonfederal undertaking that requires the federal permit, license, or approval. The following examples illustrate the meaning of the revised definition. Assume, for example, that the COE issues a permit and that permitted fill activity represents one phase of a larger nonfederal undertaking; i.e., the construction of an office building by a nonfederal entity. Under the conformity rule, the COE would be responsible for addressing all emissions from that one phase of the overall office development undertaking that the COE permits; i.e., the fill activity at the wetland site. However, the COE is not responsible for evaluating all emissions from later phases of the overall office development (the construction, operation, and use of the office building itself), because later phases generally are not within the COE's continuing program responsibility and generally cannot be practicably controlled by the COE.

evaluation does not need to consider the operational emissions from the development of the Proposed Action. With respect to construction emissions, the scope of the conformity analysis would be appropriately limited to the emissions associated with grading activities that would result in the filling of jurisdictional wetlands, any associated access roads, and any staging areas necessary to conduct the filling activity.

The USACE has re-estimated the construction emissions of the Proposed Action and the revised analysis is presented in **Appendix B** of the Final EIS. As the table in **Appendix B** shows, all emission values are less than the *de minimis* threshold for each of the nonattainment or maintenance pollutant. Given the results of the preliminary analysis, a detailed conformity analysis by the USACE is not required (40 CFR § 51.858).

Response B-19

The USEPA requests that instead of evaluating the Proposed Action's impact on regional air quality on the basis of estimated emissions, the impact should be evaluated by estimating the concentrations of pollutants that would result from the Proposed Action and comparing the estimated concentrations to the National Ambient Air Quality Standards (NAAQS). The air quality impact assessment presented in the Draft EIS is based on and consistent with the approach to air quality impact assessment that is recommended by the local air district. The Placer County Air Pollution Control District (PCAPCD) has developed the approach to the assessment of air quality impacts which is based on mass emissions of pollutants and does not require the estimation of pollutant concentrations. The air district (like all other air districts in the state) has developed thresholds of significance that are in pounds per day (or tons per year) that can be used to measure a project's impact on regional air quality. Significance thresholds produced by the air districts are designed to ensure compliance with both NAAQS and California Ambient Air Quality Standards (CAAQS).

There are essentially two reasons why the air districts throughout the state support and advocate the use of mass emissions to evaluate a project's impact on air quality and do not require projects to estimate and report pollutant concentrations for all criteria pollutants except carbon monoxide.

First, criteria pollutants are generally considered to have impacts on a regional basis, throughout an air basin, rather than on a local level. Pollutants released at one point may be transported throughout the air basin, or even into neighboring air basins. Consequently, the focus for air districts in attaining ambient air standards is on overall basin-wide emissions. The most efficient way to protect regional air quality is to restrict emissions on a mass basis, and therefore guidelines developed by the air districts include significance thresholds using pounds per day as the preferred measure. This is discussed in the PCAPCD California Environmental Quality Act (CEQA) guidelines (PCAPCD 2012).

Second, the majority of emissions associated with projects such as the Sierra Vista Specific Plan development occur off-site. For instance, in the case of the Proposed Action, mobile emissions are by far the largest portion of emissions, ranging from 69 percent for reactive organic gas (ROG) emissions to essentially 100 percent of Sulfur Oxide (SOx) and particulate matter (PM) emissions. Mobile sources generally disperse emissions over a wide area, potentially hundreds of square miles, making a regional

approach the most suitable for assessing their impact. On-site area sources represent a small fraction of the total emissions, and are also dispersed over the entire 1,600-acre project site. Therefore dispersion modeling is not a suitable method for assessing impacts from area or mobile sources associated with development projects such as the Proposed Action.

Response B-20

USEPA recommends that cumulative air quality impacts should be evaluated based on a list of projects and requests that the Final EIS include a table listing all the reasonably foreseeable future actions in the Sacramento Valley Air Basin and emission estimates from all these sources. A list-based approach is generally useful only when considering localized cumulative impacts on sensitive receptors from concurrent construction on two or more nearby projects. However for evaluating cumulative air quality impacts within an air basin that covers a very large area encompassing 11 counties,² a list-based approach is not reasonable because no matter how well the list is assembled, it will fail to capture all potential future sources of emissions in the air basin. It is for this reason that the local air districts do not advocate a list-based analysis of a project's cumulative air quality impacts. Instead, the air districts recommend a mass emissions-based analysis of each project's contribution to the cumulative air quality in the air basin.

Additionally, the local air districts in the air basin have used population growth trends, vehicle travel data, and other information to forecast future air quality conditions assuming construction of proposed projects. This information is used by the air districts to develop their air quality planning documents and guidance, as well as pollution control tools such as permit conditions, significance thresholds to be used to evaluate and control emissions of individual projects, and new regulations. The analysis completed by the air districts in support of their regional air quality planning is the most comprehensive and rigorous examination of regional growth and its impact on air quality available. An incomplete list of a few known projects, while possibly locally significant, cannot compare with the general analysis of the air basin as a whole in terms of a project's cumulative impact. That is, while the specific impacts of certain projects could be developed, the impacts would be incomplete and of little use in understanding the cumulative impacts of all foreseeable actions in the entire air basin.

Based on its obligations under the Clean Air Act, each air district, including the PCAPCD, has developed thresholds that the air district recommends be used to evaluate a project's contribution to the cumulative impact on the air quality in the air basin. If the emissions of a particular pollutant associated with a project are above the air district-recommended thresholds, the project is judged to have a significant impact on air quality, which essentially means that the project's contribution to the air basin's cumulative load of that pollutant is substantial and that the project's emissions, in conjunction with emissions from other existing and future sources, are likely to further exacerbate air quality. The Draft EIS therefore uses the air district-recommended thresholds to evaluate the Proposed Action's contribution to the cumulative impact on air quality in the air basin. As the analysis in the Draft EIS shows, the Proposed Action's construction emissions of ROG and respirable particulate matter (PM10) would exceed the district-recommended thresholds. Similarly, the operational emissions of ROG, oxides of nitrogen (NOx), carbon

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USACE #200601050

The SVAB is approximately 216 miles north to south and about 95 miles east to west at its widest point.

monoxide (CO), and PM10 would also exceed the district-recommended thresholds and would not be mitigated to levels below the thresholds with the available mitigation. The Draft EIS finds that the cumulative impact of the Proposed Action on air quality within the SVAB would be significant.

Response B-21

Text related to the provision in 40 CFR 93.153 that was deleted has been removed from the EIS. The deletion is shown in **Chapter 3.0**, **Errata**, in this Final EIS.



Department of Planning 311 Vernon Street Roseville, California 95678-2649

August 17, 2012

Mr. James Robb Senior Project Manager Department of the Army US Army Engineer District, Sacramento 1325 J Street Sacramento CA 95814-2922

RE: COMMENTS ON THE DEIS- Sierra Vista Specific Plan- USACE Action ID SPK-2006-01050

Thank you for the opportunity to review the Draft Environmental Impact Statement (DEIS) for the Sierra Vista Specific Plan project.

The City of Roseville supports the proposed action. The proposed action is within the City of Roseville's corporate boundaries, is consistent with the Sacramento Area Council of Governments Preferred Blueprint Scenario and the Metropolitan Transportation Plan Sustainable Communities Strategy. It also is adjacent to development and services such as roadways, sewer, recycled water, potable water facilities, and electric and natural gas lines. It is consistent with the City's General Plan goals and policies, and zoning ordinance.

As part of the City's review process and consistent with the Memorandum of Understanding (MOU) with the U.S. Fish and Wildlife Service (USFWs), the City participated with the Army Corps, USFWS, and U.S. Environmental Protection Agency (EPA) in meetings over a year and a half through an early consultation process. The purpose of the meetings was to provide the Agencies an early opportunity to review the proposed project, and for a sharing of information with the City, to better inform land use decisions. Agency staff were instrumental in providing feedback that ultimately led to changes to the land use plan that resulted in approximately 50 additional open space acres. The City appreciates the Agencies participation in the process.

The following provides minor comments on the document:

Page 2.0-10, Third Sentence: Please revise the sentence as follows:

Primary open space areas are those portions of the site were no minimal grading or land disturbance would occur.

Please note, consistent with the bullets on page 2.0-10, improvements are planned within the Curry Creek corridor, Federico Creek corridor and WAPA corridor to provide wetland creation and stormwater detention areas (see Figure 2.0-3a). It is anticipated that this project would be

(916) 774-5276 • (916) 744-5129 Fax • (916) 774-5220 TDD •planningdept@roseville.ca.us • www.roseville.ca.us/planning

appended to the City's Overarching Management Plan. Consistent with the Plan, it is likely that occasional maintenance activities will also occur.

3

Alternative 4

The City of Roseville questions the feasibility of Alternative 4. It is outside the area identified in the Sacramento Area Council of Governments (SACOG) Preferred Blueprint Scenario and is far from existing infrastructure including roadways, water facilities, sewer facilities, recycled water and public services.

4

5

Alternative 4 Water Supply

On page 3.15-30 the EIS indicates that treated water would be delivered through Placer County Water Agency's (PCWA) existing transmission pipeline system in the vicinity of Industrial Avenue.

Please note that a substantial increase in water demand would likely need to be supplied through PCWA's proposed Ophir Water Treatment Plant. While environmental review has occurred for the construction of the water treatment plant, there are no near-term plans by PCWA to construct the Ophir Treatment Plant. Further, environmental review only covered an extension of the water pipeline infrastructure to the vicinity of Sierra College Boulevard. The DEIS should provide information regarding the extension of facilities approximately 9 miles to the west side of Roseville, that would be needed to convey water from the Ophir facility to the Alternative 4 site, on the western boundary of Placer County.

I appreciate the opportunity to comment. If you have questions or need additional information, please feel free to call me at (916) 774-5434.

Sincerely,

Kathy Pease, AICP

Senior Planner

Letter C: City of Roseville, Kathy Pease, AICP, dated August 17, 2012

Response C-1

The comment is noted.

Response C-2

The revision has been incorporated into Chapter 2.0, Project Description of the Draft EIS, and is detailed in **Chapter 3.0**, **Errata**.

Response C-3

The comment is noted.

Response C-4

The City's comment is noted. As stated in the Draft EIS, alternate sites that could be reasonably obtained or managed to fulfill project purpose were considered. Eleven alternative sites were screened using five screening criteria. The Southwest site survived the screening and was therefore evaluated in detail in the EIS. The site contains an adequate amount of undeveloped land that could accommodate a project similar to the Proposed Action and therefore meets the project purpose.

Response C-5

The City is correct in noting that potable water to serve Alternative 4 would require an extension of the water conveyance system. Based on further consultation with the Placer County Water Agency staff, the USACE has determined that the current combined capacity of the Foothill/Sunset water treatment system is 66 million gallons per day (mgd) with the Foothill plant providing 58 mgd of capacity and the Sunset plant providing 8 mgd of capacity. As discussed in Section 3.15, Utilities, of the Draft EIS, the historic peak day demand on this system is 55 mgd, resulting in 11 mgd of unused capacity. Currently half of this unused capacity is committed to future development in western Placer County, leaving about 5.5 mgd to be utilized by other projects, including Alternative 4, on a first come-first serve basis. Based on a rate of 1,150 gallons per dwelling unit, this excess capacity could serve approximately 4,780 additional dwelling units. Given that Alternative 4 would provide 5,595 units, not enough capacity is available in the Foothill/Sunset system to serve Alternative 4, and the initial supply would need to be augmented with treated water from a new treatment source.

To meet future demand in western Placer County, the Placer County Water Agency (PCWA) is planning on constructing a new water treatment facility referred to as the Ophir Water Treatment Plant. This plant would add an additional 30 mgd to the system, and would serve the alternative site. In order to serve planned and future development west of the City of Roseville, a pipeline would be constructed from the Ophir plant through the City of Roseklin and north of the City of Roseville where it would then turn south down Watt Avenue along the western boundary of Roseville to Baseline Road. A pipeline would then be extended west from this point to the alternative site.

The pipeline project described above would be proposed by PCWA and constructed upon completion of appropriate environmental review by that agency. As it would not be constructed by the Applicants, the pipeline is not a part of Alternative 4. However, because it is required in order to develop Alternative 4, the environmental effects from the construction of this water supply improvement are analyzed and reported in the Final EIS as potential indirect effects of Alternative 4. **Appendix C** presents the indirect environmental impacts from the construction and operation of the pipeline project.



Land and Environmental Management Mailing Address 2730 Gateway Oaks, Suite 220 Sacramento, CA 95833

August 20, 2012

Mr. James Robb U.S. Army Corps of Engineers, Regulatory Division 1325 J Street, Room 1350 Sacramento, California 95814

Re: Sierra Vista Specific Plan Draft Environmental Impact Statement (SPK-2006-01050)

Dear Mr. Robb:

Thank you for the opportunity to review the Draft Environmental Impact Statement (DEIS) for the Sierra Vista Specific Plan. Pacific Gas and Electric Company (PG&E) would like to highlight our plans for constructing and operating a natural gas pipeline parallel to Baseline Road to ensure that these plans are adequately taken into consideration. Line 407 will be a 30 inch diameter natural gas pipeline to be installed within a 50-foot wide permanent easement along the north side of Baseline Road, beginning in Yolo County and terminating at Fiddyment Road, where it will connect to an existing PG&E natural gas pipeline. An additional 50 feet of temporary easement will be required on the north side of the permanent easement to allow for a 100-foot wide workspace during pipeline construction. In addition, a Pressure Limiting Station will be constructed and operated approximately 1,000 feet west of Fiddyment Road. The Revised Final Environmental Impact Report for the L406/407 project was certified by the California State Lands Commission (CSLC) on November 18, 2009, and can be found on the CSLC website at the following link:

http://www.slc.ca.gov/Division_Pages/DEPM/DEPM_Programs_and_Reports/PG_E_Line 406 407 Pipeline Project/PG E_Line_406_407_Pipeline_Project.html

Line 407 is described in Chapter 3.9 of the Sierra Vista Specific Plan DEIS. Proposed land use designations for open space are described in Chapter 2 of the DEIS states the following:

"Primary open space areas are those portions of the site where no grading or land disturbance would occur. The primary open space areas will be put under conservation easements prior to commencement of construction on a property that contains the primary open space. With respect to the secondary open space, this includes open space that is immediately adjacent to the areas to be developed and therefore could be subject to some development related grading and filling. Once these grading and filling activities are completed, the secondary open space areas would be placed under conservation easements".

1

Mr. James Robb August 20, 2012 Page 2

It is important for PG&E to ensure that land use designation restrictions for proposed open space parcels, or any land use designation, and mitigation plans will not restrict PG&E's ability to construct, operate, and maintain this pipeline or any other natural gas or electric utility facility.

1

PG&E's Line 407 construction, operation, and maintenance descriptions are provided in Section 2 of the Line 407 Draft EIR. Modifications to this project description can be found beginning on page 4-38 of the Revised Final EIR.

Thank you very much for your consideration of these comments. If you have any questions please contact me.

Sincerely,

Chris Ellis

Land and Environmental Management Pacific Gas and Electric Company

Clis Ellas

Letter D: Pacific Gas and Electric Company, Chris Ellis, dated August 17, 2012

Response D-1

The City of Roseville and the Applicants have taken the PG&E Line 407 project into account in developing the land use plan for the proposed Sierra Vista Specific Plan (SVSP). The plan provides the 50-foot permanent and an additional 50-foot temporary easement along the north side of Baseline Road for the construction of the pipeline and a site on the project site for the pressure limiting station. PG&E's comments on the Draft EIS have also been provided to the City and the Applicants so that they can follow up on these issues with PG&E and ensure that the Proposed Action does not interfere with the pipeline project.

May 2013

Sierra Vista Owners Group

1700 Eureka Road, Suite 140 Roseville, CA 95661

SENT VIA E-MAIL & US MAIL

August 20, 2012

Mr. James Robb Regulatory Division US Army Corps of Engineers Sacramento District I325 J Street Sacramento, CA 95814

RE: Comments on the Sierra Vista Specific Plan Draft Environmental Impact Statement, SPK-2006-01050

Dear Mr. Robb:

On behalf of the landowners within the Sierra Vista Specific Plan thank you for the opportunity to review the Sierra Vista Specific Plan Draft Environmental Impact Statement (DEIS). We offer the following comments for your consideration.

Page 3.4-58, Mitigation Measure BIO-2b. This mitigation contains standard language that has often been included as special conditions in DA permits and NWP approvals involving establishment of open space preserves, however, it is not consistent with what the applicants have proposed for the Sierra Vista project. The first bullet item of the mitigation measure requires that the preserves be established by permanent legal protection prior to initiation of construction activities within waters of the U.S., following Sacramento District approval of the legal instrument. While the applicants acknowledge the need to place Deed Restrictions on the primary open space areas (via legal descriptions) prior to initiating construction within each phase, the Deed Restrictions for the secondary open space areas will need to be placed on these areas after any allowed improvements have taken place. The precise boundaries of the primary open space can be legally specified (via legal description) prior to grading but the precise legal boundaries of the secondary open space cannot be determined until that grading has been completed. Because of this we recommend that the wording of BIO-2b be revised as follows.

"Prior to initiation of any work in waters of the U.S. for any particular phase of a project pursuant to its corresponding Department of the Army Permit, the primary open space within that phase shall be preserved with a Deed Restriction with permanent legal protection. Within 3 months following completion of grading of the secondary open space bordering the primary open space, the secondary open space will be established as separate legal parcel(s) with permanent legal protection.

2.0-40

1

The second bullet item of BIO-2b requires that the permittee(s) prepare a specific and detailed preserve management plan for on-site and off-site mitigation, preservation, and avoidance areas. The second bullet item further requires that the plan must be submitted to and specifically approved by the Corps prior to initiation of construction activities in waters of the U.S.

With respect to the long-term management of the on-site open space preserves, the applicants are proposing to offer the open space lands to the City of Roseville via an Irrevocable Offer of Dedications (IODs), whereupon the City will own and manage the open space pursuant to the approved City of Roseville Open Space Preserve Overarching Management Plan. This management plan was developed in consultation with, and approved by, the Corps of Engineers and U.S. Fish and Wildlife Service. The permittees will be responsible for the short-term management of the open space preserves, consistent with the Final Mitigation Plan and the City of Roseville Open Space Preserve Overarching Management Plan, until the adjacent lands are developed and the constructed wetlands have been monitored for success for the prescribed time period. After the constructed wetlands have been successfully constructed and monitored, the land will be accepted by the City of Roseville via the IODs and the long-term monitoring of the preserved open space will commence. We recommend that the second bullet item of Bio-2b be revised to read as follows.

"After each phase of the on-site mitigation has been constructed, monitored for the required time period and been determined to be successful the parcel(s) comprising that mitigation will be accepted by the City of Roseville who will then be solely responsible for its long-term maintenance consistent with the provisions of the City of Roseville Open Space Preserve Overarching Management Plan."

With respect to off-site preservation and creation/restoration of wetlands, the applicants are currently proposing purchase of credits from approved mitigation banks. The long-term maintenance of mitigation banks is provided for in the bank enabling documents. Therefore, there is no need to specify the preparation and approval of a long-term management plan for purchase of credits from a mitigation bank. The applicants have stated that they also wish to reserve the option of developing a permittee-sponsored off-site mitigation plan to accomplish their individual off-site preservation and/or restoration/creation requirements. Depending on the location of the mitigation area, it may or may not be within the City of Roseville and therefore may or may not be subject to the City of Roseville Open Space Preserve Overarching Management Plan. To cover this potential situation we recommend that the following mitigation measure be added.

"In the event that a permittee elects to develop an off-site permittee-sponsored mitigation plan in lieu of purchase of wetland preservation and/or creation credits from an approved mitigation bank, that plan will be prepared and submitted to the Corps of Engineers for approval prior to initiation of work in waters of the U.S. under the corresponding Department of the Army Permit. That plan must provide for the long-term management of the mitigation area and include a long-term funding mechanism."

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Page 3.6-23, Mitigation Measure CR-1b. Mitigation Measure CR-1b requires that a qualified archaeologist monitor essentially all excavation occurring within the open space corridors. CR-1b defines these corridors as the "protected corridor that extends about 1,300 feet from each side of Curry and Federico Creeks." This wording could be interpreted as meaning that all excavation within 1,300 feet corridor of Curry and Federico Creeks must be monitored. If this mitigation measure is to be maintained (see following comment on appropriateness of CR-1b), we recommend that the reference to 1,300 feet be deleted to clarify the intent.	4
We believe that the need for a qualified archaeologist to monitor all excavation within the preserved open space is onerous and unwarranted given the documented relatively low likelihood of encountering buried archaeological resources. The DEIS notes that that project-specific investigations failed to encounter any buried cultural materials of deposits. The DEIS further states:	
"While this tends to confirm that alluvial soils on the site of an age that potentially could contain or cover archaeological deposits are shallow, and that the potential to encounter substantial buried archaeological deposits during construction likely is low, it is nonetheless possible that shallow cultural deposits might be present in the alluvium that overlies the hardpan."	5
We believe that this same conclusion could be made regarding any site in the Central Valley of California because of similar geology and soil formation processes. To our knowledge, the Corps does not typically require that all excavation be monitored as a standard special condition for all permits issued within the Central Valley of California. As such, we believe that Mitigation Measure MM-1a is adequate and that Mitigation Measure MM-1b is unwarranted.	
In addition, please find attached a pdf of some minor clean up items related to acreages within the DEIS.	6
As we discussed with you last week, we are also preparing detailed comments on the practicability of the various alternatives and their ability to satisfy the overall project purpose. Because of the amount of preparation required for this analysis we anticipate submitting this information within the next 2 weeks.	7
We appreciate the opportunity to comment. If you have any questions or need additional information please contact me at 916-774-3400.	
Sincerely, ARA I STATE OF THE PROPERTY OF TH	
Jeff Jones Sierra Vista Project Manager	

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Open Space

The Proposed Action would preserve approximately 234 acres (95 hectares) of open space in perpetuity as open space (Figure 2.0-3a, Open Space Areas). This open space comprises approximately 197 acres of primary open space and about 37 acres of secondary open space. Primary open space areas are those portions of the site where no grading or land disturbance would occur. The primary open space areas will be put under conservation easements prior to commencement of construction on a property that contains the primary open space. With respect to the secondary open space, this includes open space that is immediately adjacent to the areas to be developed and therefore could be subject to some development-related grading and filling. Once these grading and filling activities are completed, the secondary open space areas would be placed under conservation easements. Figure 2.0-3b, Primary and Secondary Open Space, shows the relationship between primary open space, secondary open space and the development

The open space system would consist of three components.

- Curry Creek Corridor Curry Creek crosses the southern portion of the project site in an eastwest direction. The Curry Creek corridor would be preserved as permanent open space to protect its sensitive riparian and wetland resources. The Proposed Action also provides for wetland creation and related improvements in Curry Creek corridor.
- Federico Creek Corridor Federico Creek is a tributary to Curry Creek that originates in the
 north-central portion of the project site and flows southwest to join Curry Creek west of the SVSP
 area. Like Curry Creek, the Federico Creek corridor would also be preserved as permanent open
 space to protect its sensitive riparian and wetland resources, and wetland creation and other
 related improvements are also proposed for the Federico Creek corridor.
- WAPA Corridor A linear open space corridor would be preserved within the WAPA
 transmission line easement that runs east-west across the project site. Limited development—
 including limited commercial uses and parking—would be permitted on a few acres within the
 easement. Preserving most of the easement as open space would offer the opportunity for
 development of storm water detention, low-impact development features, bikeways, natural
 open space, and recreation features.

A total of about 28 acres (11 hectares) of wetland habitat would be constructed within the Curry and Federico Creek corridors; a typical design is shown in Figure 2.0-4, Wetlands Creation in Curry Creek Corridor Conceptual Plan.

Preserved open space would be managed for conservation. Open space preservation under the Proposed Action is intended to complement regional conservation strategies such as the proposed Placer County Conservation Plan, and coordination with other agencies and conservation efforts would be a guiding principle of the Sierra Vista Specific Plan's (SVSP's) resource management approach. The resource management approach would also be designed for consistency with the Memorandum of Understanding (MOU) between the City and US Fish and Wildlife Service (USFWS) with respect to the operation and expansion of the Pleasant Grove Wastewater Treatment Plan (PGWWTP), and, if the USACE issues DA permits, with the terms and conditions of those permits.

Impact Sciences USACE #200601050 2.0-10

of time to support vernal pool branchiopods. Branchiopods may rely on swales for transport between pools and are frequently found in swales during high water.

Seasonal Wetlands

The term seasonal wetland is used within the context of this EIS to describe depressions that fill naturally during the winter through direct precipitation and are dry during most of the year. Although their hydrology may be similar to that of vernal pools, they do not support typical vernal pool vegetation diversity and abundance. They support mostly a non-native, "wetland generalist" flora and are not dominated by vernal pool endemics.

There are about 6.17 acres of seasonal wetlands on the project site (Gibson & Skordal 2012). Within the project site, these depressions collect rainwater or receive water from base flow and/or overbank flooding from adjacent stream during high flows. Depths of these seasonal wetlands range from a few inches up to 2 feet. These depressional seasonal wetlands have been degraded as a result of disturbance from past farming and/or disking for fire suppression. These seasonal wetlands are essentially vernal pools that have been disturbed to the extent that they no longer support a vernal pool plant community (Gibson & Skordal 2011). Common vegetation within the seasonal wetlands includes curly dock (Rumex crispus), perennial rye, spiny-fruit buttercup (Ranuculus muricatus), tall flatsedge (Cyperus eragrostis), Vasey's coyote thistle, and European mannagrass (Glyceria declinata) (North Fork Associates 2009).

Perennial Marsh

One 0.86-acre perennial marsh is located on the project site. At the time of field surveys conducted by North Fork Associates in 2007, this marsh received irrigation from adjacent agricultural fields, so was inundated year-round and had the characteristics of a perennial marsh (North Fork Associates 2009; Gibson & Skordal 2012). Since that time, the agricultural practices on adjacent lands have changed and the wetland no longer receives enough irrigation runoff to support the perennial marsh. The marsh functions more like a seasonal marsh now since it inundates seasonally and supports a plant community more characteristic of seasonal wetlands and wetland swales described above (Gibson & Skordal 2012).

Subsequent to the delineation, the upstream reach of Curry Creek has been receiving more irrigation runoff from developed lands and has experienced beaver activity. This reach of Curry Creek now supports a perennial marsh that is inundated or saturated throughout the growing season. The dominant plant in this marsh is cattail.

Stock Ponds

There are five large stock ponds (totaling 2.07 acres) in the far western portion of the project site (North Fork Associates 2009). One of the ponds located on the western boundary of the project area is inundated year round while the other four ponds are inundated seasonally and dry up in the late summer and fall (Gibson & Skordal 2012). They are associated with farmsteads, with trees and patches of emergent vegetation (cattails, water plantain, and creeping spikerush) around the perimeter (North Fork Associates 2009).

Impact Sciences, Inc. USACE #200601050 3.4-9

These species occur within a range of specific environmental conditions that include soil type, vegetation characteristics, water depth, water temperature, inundation duration, and water quality (North Fork Associates 2009). The US Fish and Wildlife Service (USFWS) requires two-year protocol surveys to assume absence (North Fork Associates 2009; USFWS 1995).

Based on protocol surveys for listed invertebrates in the 2005–2006 and 2006–2007 wet seasons, the Applicants' consultant reports that two watersheds were occupied by listed invertebrates, while the rest of the watersheds on the project site were not occupied (Figure 3.4-2, Project Site Jurisdictional Wetlands and Watersheds) (ECORP 2006a and ECORP 2007c). Vernal pool fairy shrimp were detected during these surveys, but not vernal pool tadpole shrimp or Conservancy fairy shrimp. Both of these species have a very restricted known distribution in western Placer County compared with the vernal pool fairy shrimp making them unlikely to occur on the project site. The Applicants survey methods were somewhat unusual in that instead of sampling throughout the site or sampling until presence is confirmed and then assuming presence in suitable habitat throughout the site, they divided the site into watersheds and sampled each watershed. If a listed branchiopod was detected the Applicants stopped further sampling in that watershed and assumed that all suitable habitat within that watershed was occupied. In watersheds where no listed invertebrates were detected in the first wet season, the Applicants continued sampling for two full wet seasons (Gibson & Skordal 2010).

Within the two watersheds where listed invertebrates were detected, there are a total of 2.95 acres of vernal pools, 0.89 acre of seasonal wetlands, and 3.62 acres of seasonal wetland swales; this amounts to 7.42 acres of wetlands in these watersheds. Of the 3.62 acres of seasonal wetland swales within the two watersheds where listed invertebrates were detected, 0.49 acre is swale depressional habitat that could support listed branchiopods (Gibson & Skordal 2010).

Swale depressional habitat was not specifically delineated in the watersheds where listed invertebrates were not detected. That acreage was estimated for this EIS by applying the ratio of swale depressional to total swale habitat in the watersheds where listed invertebrates were detected to the total swale habitat in the watersheds where listed invertebrates were not detected.

The off-site areas to the north and west of the project site that would be graded in conjunction with onsite improvements or off-site infrastructure were also surveyed concurrent with on-site surveys for listed invertebrates. Areas south of Baseline Road were surveyed in conjunction with the Placer Vineyards Specific Plan project. These surveys provided data with respect to the presence of habitat for listed invertebrates in the off-site impact area.

Table 3.4-5, Listed Invertebrates Potential Habitat on Project Site and Off-Site Impact Area, below presents the potential habitat for listed invertebrates present on the project site, organized in terms of potential habitat within watersheds where invertebrates were detected and potential habitat within watersheds where the species were not detected, as well as the total potential habitat on the project site.

Impact Sciences, Inc. USACE #200601050 3.4-16

Alt. 3 (On Site)

Under Alternative 3, in addition to the areas preserved as open space under the Proposed Action, an additional 219 acres, located primarily in the central and western portions of the project site, would be preserved. This would reduce the development footprint to 1,150 acres. As a result, as shown in Table 3.4-8c Alternative 3 Impacts to Waters of the US, this alternative would involve filling of 12.35 acres of wetlands on the project site and 2.41 acres of wetlands off site for a total of 14.76 acres. Figure 3.4-7, Alternative 3 – Waters of the US On-Site Impacts, shows the affected wetlands. The loss of these wetlands would be a significant effect of this alternative.

Mitigation Measure BIO-1b would require preparation and implementation of a wetland avoidance and mitigation plan. Implementation of this mitigation measure would reduce effects to wetlands under Alternative 3 such that there would be no net loss of wetland area and functions. With mitigation, the effect would be less than significant.

Table 3.4-8c Alternative 3 Impacts to Waters of the US

Wetland Type	Waters of US on Project Site	Waters of the US within 250 feet of Project Site Boundary	On-Site Impacts	Off-Site Impacts
Ephemeral Stream	0.02	0.55	0.05	0.28
Intermittent Stream	3.26	0	0.18	0
Perennial Stream	3.94	0.21	0.15	0.08
Perennial Marsh	0.86	0.80	0.85	0.04
Pond	2.07	0	0	0
Seasonal Wetland	6.10	2.18	2.36	0.36
Vernal Pool	9.31	2.68	2.52	(0.78)
Wetland Swale	10.52	2.56	6.24	0.82
Total	36.07	8.98	12.35	2.41

Source: Gibson & Skordal 2012

(Off Site)

Alt. 4

Under Alternative 4, the proposed mixed-use community would be built on the alternative site. As shown in Table 3.4-8d, Alternative 4 Impacts to Waters of the US, this alternative would involve filling of approximately 24 acres of wetlands.² Construction of off-site improvements associated with this alternative would result in additional discharge of dredged or fill materials into Waters of the US along the alignments of the water and wastewater pipelines. However, the exact acreage that would be filled cannot be determined at this time because infrastructure alignments are approximate and access was not available

Impact Sciences, Inc. USACE #200601050 3.4-46

² This number does not include active rice fields and fallow contour rice fields on the site; the USACE has not conducted a detailed evaluation of these areas; further evaluation could potentially find that some of these areas contain jurisdiction wetlands.

Table 3.4-11b
Alternatives 1 and 2 Impacts to Listed Vernal Pool Invertebrate Habitat – Off Site

		Occurrence	Occurrence Detected Watersheds			Occurrence Not Detected Wa		
Type	Total Acres Off Site	Direct Impacts	Indirect Impacts	Total Impacts within	Estimated Direct Impacts	Estimated Indirect Impacts	Estimated Total Impacts	
Vernal Pools	2.68	0.69	1.47	2.16	0.05	0.27	0.32	
Seasonal Wetlands	2.18	0.18	0.88	1.06	0.06	0.82	0.88	
Wetland Swales	2.56	0.43	0.83	1.26	0.35	0.85	1.20	
Swale Depressional	0.09	0.02	0.04	0.06	0.00	0.00	0.00	
Total*	4.95	0.89	2.39	3.60	0.11	1.09	1.20	

Source: Gibson & Skordal 2012

Alt. 3 (On Site)

Alternative 3 would focus the area of disturbance on the project site such that there would be contiguity within the preserved areas. As shown in Table 3.4-12a, Alternative 3 Impacts to Listed Vernal Pool Invertebrate Habitat – On Site, and Table 3.4-12b, Alternative 3 Impacts to Listed Vernal Pool Invertebrate Habitat – Off Site, the alternative would directly impact 2.5 acres of listed species' habitat on the project site and 3.4 acres off the project site for a total of about 6 acres within watersheds where the species were detected and about 11 acres in watersheds where the species were not detected. The loss of listed vernal pool invertebrates or their habitat as a result of grading, filling, or indirect degradation would be a significant effect of the alternative.

Mitigation Measure BIO-1b and Mitigation Measure BIO-2a would reduce impacts on listed vernal pool invertebrate habitat by providing replacement habitat and preserving wetlands similar to those removed by the alternative. Mitigation Measure BIO-2b would also be implemented to avoid or reduce potential construction-phase indirect impacts on vernal pool species habitat within the preserved areas on the project site. The effect would be less than significant with mitigation.

^{*} Total includes vernal pools, seasonal wetlands, and swale depressional habitat.

Letter E: Sierra Vista Owners Group, Jeff Jones, dated August 20, 2012

Response E-1

The USACE has reviewed the Applicants' suggested changes to Mitigation Measure BIO-2b and agrees that the reworded mitigation measure will satisfy the intent of the original mitigation measure which is the preservation of open space parcels on the project site as early as possible.

The revisions have been incorporated into Section 3.4, Biological Resources, of the Draft EIS, and are detailed in **Chapter 3.0 Errata** in this Final EIS.

Response E-2

The USACE agrees with the rewording of the second bullet under Mitigation Measure BIO-2b which clarifies that the long-term maintenance of the preserved open space parcels will be the responsibility of the City of Roseville.

The revisions have been incorporated into Section 3.4, Biological Resources, of the Draft EIS, and are detailed in **Chapter 3.0 Errata** in this Final EIS.

Response E-3

Should the Applicants propose an off-site permittee-responsible mitigation site, the USACE will review that proposal and the specific provisions for long-term management. The USACE may determine that inclusion of the mitigation sites within the Roseville Preserve network is suitable, depending upon a number of factors including the past performance and adequacy of management practices at that point in time. The revision has been incorporated into Section 3.4, Biological Resources, of the Draft EIS, and is detailed in **Chapter 3.0 Errata** in this Final EIS.

Response E-4

The USACE has reviewed the Applicants' comments and suggestion regarding Mitigation Measure CUL-1b. The USACE has also reviewed other materials in its files and agrees Mitigation Measure CUL-1b can be deleted. The revision has been incorporated into Section 3.6, Cultural Resources, of the Draft EIS, and is detailed in **Chapter 3.0 Errata** in this Final EIS.

Response E-5

The USACE agrees with the Applicants that Mitigation Measure CUL-1a is adequate. As stated above in **Response E-4**, Mitigation Measure CUL-1b has been deleted.

Response E-6

All indicated revisions have been incorporated into Chapter 2.0, Project Description, and Section 3.4, Biological Resources, of the Draft EIS, and are detailed in **Chapter 3.0 Errata** in this Final EIS.

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Response E-7

The comment is noted.

Sierra Vista Specific Plan Final EIS

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Janet M. Laurain Adams Broadwell Joseph & Cardozo 601 Gateway Boulevard, Suite 1000 South San Francisco, CA 94080 (650) 589-1660 jlaurain@adamsbroadwell.com

Letter F: Janet Laurain, dated August 20, 2012

Response F-1

In May 2010, the City of Roseville certified an Environmental Impact Report (EIR) for the specific plan area and approved the Sierra Vista Specific Plan (SVSP).

Response F-2

The SVSP project site is made up of 10 properties controlled by the following six entities: CGB Investments; D.F. Properties, Inc.; Mourier Investment, LLC (MILLC); Baseline P&R, LLC; Baybrook LP.; and Westpark Associates.

3.1 INTRODUCTION

This chapter shows revisions to the Draft EIS, subsequent to the document's publication and public review. The revisions are presented in the order in which they appear in the Draft EIS and are identified by page number in respective chapters. These revisions are shown as excerpts from the Draft EIS. Strikethrough (strikethrough) text indicates deletions and underlined (underlined) text indicates additions.

3.2 REVISIONS TO THE DRAFT EIS

1.0 Introduction

Since the publication of the Draft EIS, one of the project site properties has been subdivided into two properties. In response to this change, the first paragraph under "Section 1.2 Project Location" on page 1.0-2 is hereby revised as follows:

The project site is located northwest of the intersection of Fiddyment Road and Baseline Road in the western portion of the City of Roseville (**Figure 1.0-1 Regional Setting** and **Figure 1.0-2**, **Project Location**). As shown in **Figure 1.0-3**, **Site Ownership**, the project site is made up of nine 10 properties controlled by the following six entities: CGB Investments; D.F. Properties, Inc.; Mourier Investment, LLC (MILLC); Baseline P&R, LLC; Baybrook LP.; and Westpark Associates. The nine 10 properties and the Placer County assessor's parcel numbers (APNs) for the parcels they comprise are shown on **Figure 1.0-3**. 1

Also in response to the property subdivision, Figure 1.0-3, Site Ownership, located after page 1.0-5 has been revised and is presented after page 3.0-2 with the title "Revised Site Ownership."

The last sentence of the first paragraph under "Section 1.3 History of Proposed Federal Action" on page 1.0-2 is hereby revised as follows:

Nine<u>Ten</u> applications cover development on the <u>nine10</u> properties and one application covers the construction of the proposed infrastructure needed to support the development of the proposed mixed-use community.

_

There are land parcels to the north and west of the SVSP area that were formerly proposed for development as part of the SVSP. However, the owners of those properties did not participate in the environmental review of the Specific Plan and those parcels, known as the Chan and the Westbrook (previously Richland) properties, are not part of the Proposed Action. As the development of those lands is considered foreseeable, development of those properties will be included in the evaluation of cumulative impacts in this EIS.

A footnote has been added to the fourth paragraph under "Section 1.4 Project Purpose and Need" on page 1.0-6 as follows:

The Proposed Action is defined as a "mixed-use" community as it comprises not only residential but also commercial uses, public and quasi-public uses, parks, and open space. The residential component of the project is proposed to help meet the foreseeable regional housing demand based on Sacramento Area Council of Government's (SACOG's) projections that the region will add approximately 2 million people by 2050.2

The second paragraph under "Section 1.7 Scope and Focus of this Environmental Impact Statement" on page 1.0-8 is hereby revised as follows:

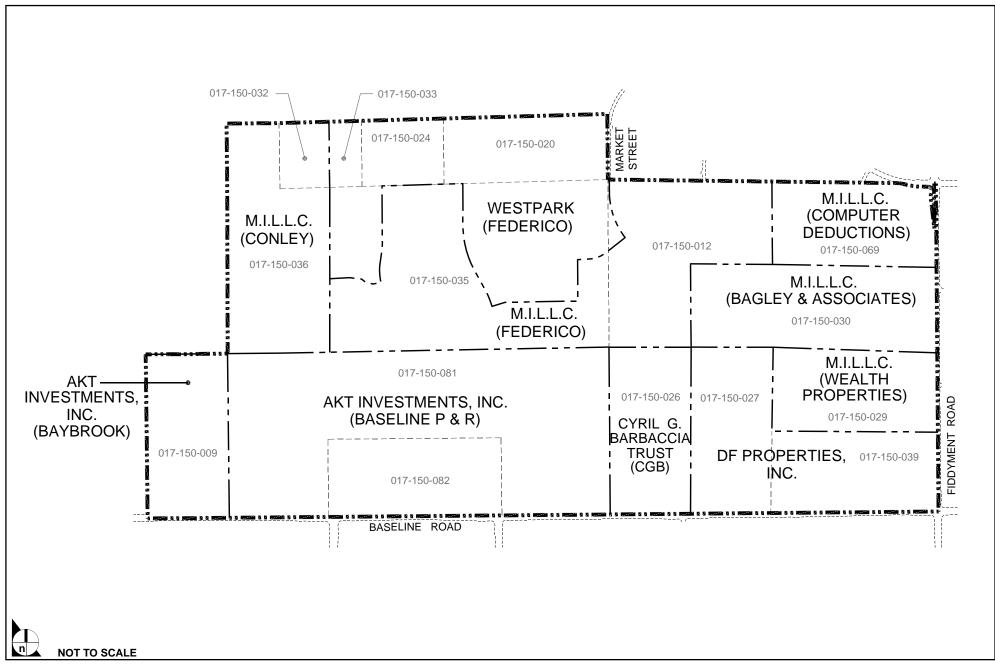
As identified above, 1011 DA permit applications have been submitted: one for the development of infrastructure proposed in the SVSP and one each for development on the nine10 properties making up the project site. It is possible that the USACE could elect to issue none or only some of the permits. However, the nine10 permits collectively would authorize implementation of 95 percent of the SVSP. As separate analysis of the individual permits might result in piecemeal analysis or segmentation, which is prohibited under the CEQ NEPA Implementing Regulations (40 CFR Sec. 1502.4[a]) because of the potential to underestimate environmental effects, even though multiple permits are involved, the permit decisions are treated as a single evaluative process and all of the permits are included in the single federal action evaluated in this EIS.

The lettered bullet points beneath bullet point 2, under "Section 1.11 Intended Use of this Document" on pages 1.0-10 and 1.0-11 are hereby revised as follows:

- a. A single permit decision issued to the Applicants as a group;
- b. NineTen separate standard permit decisions issued to each individual applicant and a single infrastructure permit decision issued to the Applicants as a group;
- c. <u>NineTen</u> separate standard permit decisions issued to each individual applicant and numerous standard permit decisions issued to the Applicants as a group comprised of functional segments of the infrastructure (estimated at 70 or more separate permits); or
- d. NineTen separate standard permit decisions issued to each individual applicant and a Regional General Permit establishing a flexible yet efficient permitting mechanism dealing with the uncertain timing of infrastructure needs and construction.

-

According to the Metropolitan Transportation Plan and Sustainable Communities Strategy 2035 adopted by SACOG in April 2012, the region is now projected to grow to 871,000 persons by 2035.



SOURCE: MacKay & Somps, January 2013

2.0 Proposed Action and Alternatives

The first two sentences under "Open Space" on page 2-10 are hereby revised as follows:

The Proposed Action would preserve approximately 234229 acres (9593 hectares) of open space in perpetuity as open space (**Figure 2.0-3a, Open Space Areas**). This open space comprises approximately 197196 acres (79 hectares) of primary open space and about 3733 acres (13 hectares) of secondary open space. Primary open space areas are those portions of the site where nominimal grading or land disturbance would occur.

The second paragraph under "Section 2.5.5 Alternative 4: Southwest Site" on page 2.0-23 is revised as follows:

Off-site utility improvements required to served development under Alternative 4 include water, sewer, and recycled water pipelines. A sewer force main would be constructed from a sewer pump station on the alternative site in a northerly and then easterly direction to the Pleasant Grove Wastewater Treatment Plant (WWTP). Finally, a recycled water line would be constructed from the Pleasant Grove WWTP to the alternative site along the same alignment as the sewer main. To serve the early phases of development on the Alternative 4 site, aA water main connecting to the City of Roseville water distribution system would be constructed from the intersection of Fiddyment Road and Baseline Road west along Baseline Road to the alternative site, then north along Brewer Road through the site, and then in an easterly direction to a location 0.5 mile northwest of the Pleasant Grove Wastewater Treatment (WWTP) Plant. To serve the buildout, additional water would be supplied to the site from the Ophir water treatment plant that has been approved for construction by Placer County Water Agency (PCWA). Water from this plant would be conveyed to the vicinity of Alternative 4 site via a new pipeline that would extend from the Ophir plant through the City of Rocklin and north of the City of Roseville where it would then turn south down Watt Avenue along the western boundary of Roseville to Baseline Road. A sewer force main would be constructed from a sewer pump station on the alternative site in a northerly and then easterly direction to the Pleasant Grove WWTP. Finally, a recycled water line would be constructed from the Pleasant Grove WWTP to the alternative site along the same alignment as the sewer main.

3.3 Air Quality

"Section 3.3.6 General Conformity" starting on page 3.3-34 is hereby replaced by the Revised General Conformity Analysis which is presented in **Appendix B** of the Final EIS:

Under section 176(c)(1) of the federal CAA, federal agencies that "engage in, support in any way or provide financial assistance for, license or permit, or approve any activity"(42 USC. Section 7506(c)) must demonstrate that such actions do not interfere with state and local plans to bring an area into attainment with the National Ambient Air Quality Standards. Specifically, the Air Basin is designated as nonattainment with respect to the national standards for 8 hour ozone and PM2.5. The program by which a federal agency determines that its action would not obstruct or conflict with air quality attainment plans is referred to as general conformity. The implementing regulations for general conformity are found in Title 40 CFR, Part 51, Subpart W and Part 93, Subpart B. In addition, the Air District has adopted the federal general conformity regulations under Regulation 5, Rule 508.

Under the general conformity regulations, both the direct and indirect emissions associated with a federal action must be evaluated. Subpart W defines direct emissions as:

[T]hose emissions of a criteria pollutant or its precursors that are caused or initiated by the Federal action and occur at the same time and place as the action (40 CFR Section 51.852).

Indirect emissions are defined as:

[T]hose emissions of a criteria pollutant or its precursors that:

- (1) Are caused by the Federal action, but may occur later in time and/or may be farther removed in distance from the action itself but are still reasonably foreseeable; and
- (2) The Federal agency can practicably control and will maintain control over due to a continuing program responsibility of the Federal agency (40 CFR Section 51.852).

The USACE will not maintain control over those elements of the Proposed Action or alternatives associated with operation of facilities related to development under the Sierra Vista Specific Plan. Accordingly, this evaluation will only consider those emissions associated with the construction of the Proposed Action and alternatives.

A conformity determination is required for each criteria pollutant or precursor where the total of direct and indirect emissions of the criteria pollutant or precursor in a federal nonattainment or maintenance area would equal or exceed specified annual emission rates, referred to as *de minimis* thresholds, or would be regionally significant. A project's direct and indirect emissions are regionally significant if they exceed 10 percent or more of a nonattainment or maintenance area's emissions inventory for that pollutant. For ozone precursors, the *de minimis* thresholds depend on the severity of the nonattainment classification; for other pollutants, the threshold is set at 100 tons per year. The Air Basin was designated as serious nonattainment for ozone by the US EPA in June 2004. However, due to concerns with meeting emissions reductions targets, the member air districts of the Sacramento Federal Nonattainment Area requested a voluntary reclassification to severe, which was approved by the US EPA in June 2010. The

relevant de minimis thresholds for the Air Basin are shown below in Table 3.3-10.

Table 3.3-10 General Conformity De Minimis Thresholds

Pollutant	Attainment Status	Annual Emissions (ton/yr)
NO x	 Nonattainment/Sever e (Ozone) 	<u> </u>
◆ VOC	 Nonattainment/Sever e (Ozone) 	<u> </u>
PM2.5 (direct)	• Nonattainment	<u> 100</u>
◆ PM2.5 (NOx) ¹	• Nonattainment	<u> 100</u>
► PM2.5 (VOC and NH2) ²	• Nonattainment	• 100
• PM2.5 (SOx)	• Nonattainment	<u>+ 100</u>

Notes 1

Annual construction emissions were estimated by multiplying the modeled daily emissions by 260 days (assuming 52 weeks per year of construction, with 5 days per week of activity) and dividing the total by 2,000 to convert from pounds to tons. The values chosen were for the Proposed Action. Emissions totals for the alternatives are less than those for the Proposed Action, so that if the Proposed Action is determined to meet the conformity criteria then the alternatives would as well. The resultant annual emissions for each nonattainment or maintenance pollutant in each construction year are shown in Table 3.3-11. The emission values in bold text are the years in which the de minimis threshold for that pollutant would be exceeded.

^{*-} NOx is included for PM2.5 unless determined not to be a significant precursor. However, the NOx threshold based on its contribution to ozone is more stringent.

²—VOC and ammonia (NH₃) are not included for PM2.5 unless determined to be a significant precursor. However, the VOC threshold based on their contribution to ozone is more stringent. Only very minor emissions of ammonia would be emitted to the atmosphere as a result of the Proposed Action or its alternatives.

Table 3.3-11
Direct Annual Construction Emissions

	VOC	NO x	SO x	PM2.5
Year	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
2013	125.3	10.9	0.03	13.7
2014	153.0	10.1	0.03	13.6
2015	127.6	7.1	0.03	13.1
2016	89.5	8.4	0.01	11.9
2017	232.0	7.3	0.04	20.2
2018	190.4	5.5	0.03	18.5
2019	221.9	5.0	0.03	18.5
2020	193.2	7.4	0.03	19.0
2021	147.1	6.1	0.03	15.4
2022	151.5	4.7	0.03	15.4
2023	156.0	6.1	0.03	15.4
2024	147.4	6.1	0.03	16.5
Thresholds (tons/yr)	25	25	100	100
Exceeds Threshold?	¥ES	NO	NO	NO

Source: Impact Sciences, Inc. Emissions calculations are provided in Amendix 3.

As shown in **Table 3.3-11**, the annual direct emissions of VOC would exceed the *de minimis* threshold in every year. Thus, further conformity analysis is required for this pollutant. No further conformity analysis is required for NOx, SOx, or PM2.5 because their emissions would be less than the conformity thresholds.

For ozone and nitrogen dioxide (i.e., when VOC or NOx exceed the *de minimis* threshold), a second test for conformity is whether the project's emissions are consistent with the emissions inventory (also referred to as the emissions budget) in the approved SIP. Specifically, for ozone this test is met if "[t]he total of direct and indirect emissions from the action (or portion thereof) *is determined and documented by the State agency* primarily responsible for the applicable SIP to result in a level of emissions which, together with all other emissions in the nonattainment (or maintenance) area, would not exceed the emissions budgets specified in the applicable SIP" (40 CFR Section 93.158(a)(5)(i)(A)) (emphasis added).

The applicable SIP is the most recent version of the plan that has been approved by the US EPA. For the Air Basin, the most recent plan is the 2008 Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2008 Ozone Plan). The 2008 Ozone Plan has been partially approved by the US EPA, specifically the motor vehicle emissions budget for use in traffic conformity determinations. The most recent regional ozone plan to be fully approved by the EPA is the 1994 SIP.

However, the 1994 SIP was produced to respond to ozone standards that have since been revoked and replaced with more stringent ones. The 2008 Ozone Plan was produced to address the updated national standards for ozone, and would therefore be more stringent than the previous 1994 SIP, with lower emissions budgets. Consequently, while the 2008 Ozone Plan is still pending overall approval by the US EPA, it has been used as the most conservative basis for this conformity analysis. This conformity analysis involves a comparison of the maximum daily direct emissions of VOC (i.e., mobile source exhaust emissions and architectural coatings) to the daily emissions budgets from the 2008 Ozone Plan for the most relevant emission categories. Years provided in the 2008 Ozone Plan are 2014, 2017, and 2018. 2018 is the year of demonstration of attainment for the SVAB.

Table 3.3-12 shows a comparison of the maximum daily direct emissions of VOC to the daily emissions inventory from the 2008 Ozone Plan for the most relevant emission categories.

Table 3.3-12
Comparison of Direct Proposed Action Emissions with SIP VOC Emission Inventory

Construction Year	SIP Emissions Budget [†] Arch. Coatings (tons/day)	SIP Emissions Budget [‡] Const. Equip (tons/day)	SIP Emissions Budget Combined (tons/day)	Direct Proposed Action Emissions (tons/day) ^{2,3}
2014	7.6	4.9	12.5	0.59
2017	8.0	3.9	11.9	0.89
2018	8.1	3.7	11.8	0.73

Source:

As shown in Table 3.3-12, the direct Proposed Action emissions are well below the levels in the applicable SIP emissions budget for the Sacramento Valley Air Basin. The above information indicates that the Proposed Action direct (construction) emissions are accounted for in the SIP (i.e., these emissions are well within the emissions budgets for the applicable source categories) and that together with all other emissions in the nonattainment area would not be likely to exceed the emissions budgets specified in the applicable SIP. However, the Air District, as the agency responsible for the SIP, must make a formal determination in response to a request from the USACE in accordance with 40 CFR Section 51.858(a)(5)(i)(A) that the Proposed Action's direct and indirect emissions would not exceed the emissions budgets specified in the applicable SIP. However, based on this preliminary analysis, a detailed conformity analysis by the USACE would not likely be required (40 CFR Section 51.858). In addition, the direct emissions associated with the Proposed Action would not conflict with or obstruct implementation of the applicable air quality plan (i.e., SIP for the Sacramento Valley Air Basin).

¹ Sacramento Regional 8 Hour Ozone Attainment and Reasonable Further Progress Plan, SMAQMD, Dec 19, 2008.

²—Total maximum daily VOC emissions are shown in **Table 3.3-11** and converted to tons/day.

^{3—}These VOC emissions are primarily from off road diesel equipment and architectural coatings but include small contributions from other construction related sources such as worker vehicles, and are therefore likely overestimated.

3.4 Biological Resources

The first sentence of the second paragraph under "Seasonal Wetlands" on page 3.4-9 is hereby revised as follows:

There are about 6.176.10 acres of seasonal wetlands on the project site (Gibson & Skordal 2012).

The third paragraph on page 3.4-16 is hereby revised as follows:

Within the two watersheds where listed invertebrates were detected, there are a total of 2.953.05 acres of vernal pools, 0.89 acre of seasonal wetlands, and 3.62 acres of seasonal wetland swales; this amounts to 7.427.55 acres of wetlands in these watersheds. Of the 3.62 acres of seasonal wetland swales within the two watersheds where listed invertebrates were detected, 0.490.56 acre is swale depressional habitat that could support listed branchiopods (Gibson & Skordal 2010).

Table 3.4-8c on page 3.4-46 is hereby revised as follows:

Table 3.4-8c Alternative 3 Impacts to Waters of the US

		Waters of the US within 250 feet of		
	Waters of US on	Project Site	On-Site	Off-Site
Wetland Type	Project Site	Boundary	Impacts	Impacts
Ephemeral Stream	0.02	0.55	0.05	0.28
Intermittent Stream	3.26	0	0.18	0
Perennial Stream	3.94	0.21	0.15	0.08
Perennial Marsh	0.86	0.80	0.85	0.04
Pond	2.07	0	0	0
Seasonal Wetland	6.10	2.18	2.36	0.36
Vernal Pool	9.31	2.68	2.52	0.78 <u>0.83</u>
Wetland Swale	10.52	2.56	6.24	0.82
Total	36.07	8.98	12.35	2.41

Source: Gibson & Skordal 2012

Table 3.4-10a on page 3.4-52 is hereby revised as follows:

Table 3.4-10a Proposed Action Impacts to Listed Vernal Pool Invertebrate Habitat – On Site

				Occurrence Detected Watersheds			rence Not De Watersheds	tected
Туре	Total Potential Habitat	Total Wetlands Filled	Direct Impacts	Indirect Impacts	Total Impacts	Estimated Direct Impacts	Estimated Indirect Impacts	Estimated Total Impacts
Vernal Pools	9.31	6.12	2.09	0.56	2.65	4.03	2.36	6.39
Seasonal Wetlands	6.10	4.36	0.53	0.36	0.89	3.84	1.34	5.18
Wetland Swales	10.52	8.30	2.80	0.29	3.09	5.50	1.41	6.91
Swale Depressional	0.49 <u>0.56</u>	0.38	0.38	0.08	0.46	0.00	0.00	0.00
Total*	15.90 15.97	10.86	3.00	1.00	4.00	7.87	3.70	11.57

Source: Gibson & Skordal 2012

Table 3.4-11a on page 3.4-54 is hereby revised as follows:

Table 3.4-11a Alternatives 1 and 2 Impacts to Listed Vernal Pool Invertebrate Habitat – On Site

			Occu	rrence Det	ected	Occurr	ence Not Det	ected	Total
				Watersheds	5		Watersheds		Potential
	Total	Total				Estimated	Estimated		Impacts in
	Potential	Wetlands	Direct	Indirect	Total	Direct	Indirect	Total	all
Type	Habitat	Filled	Impacts	Impacts	Impacts	Impacts	Impacts	Impacts	Watersheds
Vernal Pools	9.31	1.86	0.63	1.60	2.23	1.23	3.84	5.07	7.30
Seasonal Wetlands	6.10	1.93	0.14	0.34	0.48	1.79	2.00	3.79	4.27
Wetland Swales	10.52	2.09	0.91	1.39	2.30	1.18	4.65	5.83	8.13
Swale Depression al	0.49 0.56	0.11	0.11	0.21	0.32	0.00	0.00	0.00	0.32
Total*	15.90 <u>15.97</u>	3.90	0.88	2.15	3.03	3.02	5.84	8.86	11.89

Source: Gibson & Skordal 2012

 $^{{\}it * Total includes vernal pools, seasonal wetlands, and swale depressional habitat}$

 $^{^{}st}$ Total includes vernal pools, seasonal wetlands, and swale depressional habitat

Table 3.4-11b on page 3.4-55 is hereby revised as follows:

Table 3.4-11b
Alternatives 1 and 2 Impacts to Listed Vernal Pool Invertebrate Habitat – Off Site

		Occurrenc	e Detected W	atersheds	Occurrence	Not Detected	Watersheds
	Total			Total	Estimated	Estimated	Estimated
	Acres Off	Direct	Indirect	Impacts	Direct	Indirect	Total
Type	Site	Impacts	Impacts	within	Impacts	Impacts	Impacts
Vernal Pools	2.68	0.69	1.47	2.16	0.05	0.27	0.32
Seasonal Wetlands	2.18	0.18	0.88	1.06	0.06	0.82	0.88
Wetland Swales	2.56	0.43	0.83	1.26	0.35	0.85	1.20
Swale Depressional	0.09	0.02	0.04	0.06	0.00	0.00	0.00
Total*	4.95	0.89	2.39	3.60 <u>3.28</u>	0.11	1.09	1.20

Source: Gibson & Skordal 2012

Table 3.4-12a on page 3.4-56 is hereby revised as follows:

Table 3.4-12a Alternative 3 Impacts to Listed Vernal Pool Invertebrate Habitat – On Site

				Occurrence Detected Watersheds			ence Not Det Watersheds	ected	Total Potential
Type	Total Potential Habitat	Total Wetlands Filled	Direct Impacts	Indirect Impacts	Total Impacts	Estimated Direct Impacts	Estimated Indirect Impacts	Total Impacts	Impacts in all Watersheds
Vernal Pools	9.31	2.52	1.03	0.75	1.79	1.48	4.10	5.58	7.37
Seasonal Wetlands	6.10	2.36	0.28	0.13	0.41	2.08	1.95	4.03	4.44
Wetland Swales	10.52	5.97	2.09	0.30	2.39	3.88	2.49	6.37	8.76
Swale Depressional	0.49 0.56	0.27	0.27	0.02	0.29	0.00	0.00	0.00	0.29
Total*	15.90 15.97	4.96	1.58	0.91	2.49	3.56	6.05	9.61	12.10

Source: Gibson & Skordal 2012

^{*} Total includes vernal pools, seasonal wetlands, and swale depressional habitat.

 $^{{\}rm *\ Total\ includes\ } vernal\ pools, seasonal\ wetlands, and\ swale\ depressional\ habitat.$

Mitigation Measure BIO-2b on page 3.4-58 is hereby revised as follows:

- The Applicants/developer shall place created and/or avoided preserved wetlands, other aquatic areas, and any vegetative buffers preserved as part of mitigation for impacts into a separate "preserve" parcel prior to initiation of construction activities within waters of the US Permanent legal protection shall be established for all preserve parcels, following Sacramento District approval of the legal instrument.
- The Applicants/developer shall develop a specific and detailed preserve management plan for the on site and off site mitigation, preservation, and avoidance areas. This plan shall be submitted to and specifically approved, in writing, by the USACE prior to initiation of construction activities within waters of the US. This plan shall describe in detail any activities that are proposed within the preserve area(s) and the long term funding and maintenance of each of the preserve area(s).
- Prior to initiation of any work in waters of the U.S. for any particular phase of a project pursuant to its corresponding Department of the Army Permit, the primary open space within that phase shall be preserved with a Deed Restriction with permanent legal protection. Within three months following completion of a grading of the secondary open space bordering the primary open space, the secondary open space will be established as separate level parcel(s) with permanent legal protection.
- After each phase of the on-site mitigation has been constructed, monitored for the required period, and been determined to be successful, the parcel(s) comprising that mitigation will be accepted by the City of Roseville who will then be solely responsible for its long-term maintenance consistent with the provisions of the City of Roseville Open Space Preserve Overarching Management Plan.
- <u>In the event that a permittee elects to develop an off-site permittee-sponsored mitigation plan in lieu of purchase of wetland preservation and/or creation credits from an approved mitigation bank, that plan will be prepared and submitted to the Corps of Engineers for approval prior to initiation of work in waters of the U.S. under the corresponding Department of the Army Permit. That plan must provide for the long-term management of the mitigation area and include a long-term funding mechanism.</u>

3.6 Cultural Resources

Impact CR-1 on pages 3.6-19 to 3.6-22 is hereby revised as follows:

Proposed Action

The Proposed Action would result in **significant** effects to undiscovered historic properties or human remains during construction. Proposed mitigation would reduce effects to undiscovered resources to **less than significant**.

No historic properties have been identified in the project APE, including both the horizontal and vertical areas of potential effect, and geoarchaeological data suggest that the potential for buried prehistoric deposits to be present on the project site is low, including the areas near Curry Creek. However, it is possible that past meanders of the creek or undocumented flood events might have resulted in burial of prehistoric or historic archaeological features or deposits along Curry Creek that have not been discovered through the archaeological investigations reported here. The Proposed Action preserves an open space corridor along Curry Creek and Federico Creek where no buildings would be constructed. However ground-disturbing activities associated with the construction of trails, stormwater outfalls, and wetland mitigation areas

would occur in these areas and culverts and bridges would also be built where needed to provide circulation and drainage on the site. If a NRHP-eligible buried archaeological deposit or feature, or human remains—either in an archaeological context or in isolation—were discovered during construction, disturbance or destruction of the deposit or the remains would constitute a **significant** effect to an historic property. **Mitigation Measure CR-1a** is proposed to avoid or reduce an inadvertent significant effect on previously unknown historic properties encountered during construction in any portion of the site to **less than significant**.

Furthermore, the USACE has determined that while Mitigation Measure CR-1a would reduce the potential to damage or destroy buried cultural resources, there is still the potential that prehistoric archaeological materials, in particular, could be encountered as the result of project related excavation within the Curry Creek or Federico Creek corridors. If such resources were encountered during construction, they might not be recognized as such by construction workers and, if work did not stop, could be damaged or destroyed. In this case, the significant effect would not be fully mitigated.

Mitigation Measure CR-1b, also listed below, would be implemented for any work activities within the Curry Creek and Federico Creek corridors. This mitigation measure requires archaeological monitoring of excavations within the shallow (18 to 125 cm [7 to 49 inches) deposits overlying hardpan soils along Curry and Federico creeks. With the incorporation of this measure, the significant effect on unanticipated historic properties found during construction would be reduced to less than significant.

No Action

The No Action Alternative would result in **significant** effects to undiscovered historic properties or human remains during construction. Proposed mitigation would reduce effects to undiscovered resources to **less than significant**.

Under the No Action Alternative, no project work would be carried out within the waters of the United States on the project site. Under this alternative, there would be no ground disturbance at all along Curry Creek or Federico Creek. Since this is the area within the project site that has the highest potential for previously undiscovered archaeological deposits to be present, under this alternative the potential to encounter previously undiscovered buried cultural resources would be small. The requirements of the NHPA with regard to eligibility of resources to the NRHP and involvement of the federal lead agency in effects determination and mitigation also would not apply. However, there would still be some potential for undiscovered buried archaeological deposits to be present and to be impacted by ground disturbance elsewhere within the project site. Based on the significance criteria listed above and for the same reasons presented above for the Proposed Action, the effect on undiscovered historic

properties or human remains would be **significant** under the No Action Alternative. Mitigation for unanticipated archaeological discoveries (**Mitigation Measure CR-1a**) is proposed that would reduce this effect to **less than significant**.

Alts. 1, 2, 3 (On Site)

All of the on-site alternatives would result in **significant** effects to undiscovered historic properties or human remains during construction. Proposed mitigation would reduce effects to undiscovered resources to **less than significant**.

All of the on-site alternatives have the potential to encounter unanticipated buried cultural deposits. However, the total area of ground disturbance on the site would be reduced and the amount of ground disturbance along Curry Creek (the most sensitive area for potential buried prehistoric deposits) and Federico Creek would also be reduced. Nonetheless, there would be some potential to encounter buried prehistoric deposits, potentially along stream channels. Based on the significance criteria listed above and for the same reasons presented above for the Proposed Action, the effect on undiscovered historic properties or human remains would be **significant** under all of the on-site alternatives. **Mitigation Measures CR-1a** and **CR-1b** are is proposed that would reduce this effect to **less than significant**.

Alt. 4 (Off Site)

Alternative 4 would result in **significant** effects to undiscovered historic properties or human remains during construction. Proposed mitigation would reduce effects to undiscovered resources to **less than significant**.

Alternative 4 site is geographically and historically similar to the project site. Curry Creek and two intermittent creeks traverse the alternative site, and it includes a scattering of buildings and building clusters that probably represent historic and modern ranch sites and ranch structures similar to those recorded at the project site.

An archaeological records search of the alternative site was carried out at the North Central Information Center of the California Historical Resources Information System in January 2011. About 10 percent of the alternative site area has been subject to past archaeological surveys, and these surveys resulted in recordation of eight cultural resources within the alternative site boundaries, all of the historic period. Recorded resources include one bridge, five houses (dating from ca. 1908 to the modern era, some with associated ranch-related structures), and two modern roads on historic alignments. The bridge was determined not eligible to the NRHP. Three of the houses were also recommended as not eligible. No eligibility assessment was made of the other two houses or of the two roads, but records suggest that none of these sites are likely to meet NRHP eligibility criteria.

The USGS topographic quadrangle maps that include the alternative site and off-site improvements associated with Alternative 4 show a number of additional structures or buildings that have not been recorded or assessed. It is possible that some of the structures indicated, which likely represent ranch complexes, may retain historic

integrity or are otherwise significant, or might have associated historic archaeological deposits that could be eligible to the NRHP based on data potential. However, based on geographic and historical similarity with and proximity to the project site, it is likely that much of the historic development in this area is similar to that of the (nearby) project site, consisting primarily of Post WWII Minimal Tradition ranch houses or earlier ranch complexes substantially altered by subsequent decades of use. It is very likely that archaeological deposits of the historic period are present, given the substantial number of structures and vacated structures that are indicated on the topographic maps. The survey coverage of the alternative site has not been sufficient to make a meaningful assessment of the potential for subsurface archaeological deposits of the prehistoric period.

Due to lack of access, a pedestrian survey of the Alternative 4 site or the alignments of the off-site improvements could not be performed. However, as the Alternative 4 site and off-site improvements have topographic settings and geologic history that is similar to that of the project site, the potential for buried archaeological deposits of the prehistoric period within the alternative site and along the alignments of the off-site improvements is likely similar to that of the project site. As at the project site, there is some potential for buried prehistoric deposits to be present along the creeks that cross the project site. There is a somewhat greater potential to encounter buried archaeological deposits where the creeks are crossed by the proposed off-site improvements. Based on the significance criteria listed above and for the same reasons presented above for the Proposed Action, the effect on undiscovered historic properties or human remains would be **significant** under the off-site alternative.

Mitigation Measures CR-1a and CR-1b therefore would apply to this site and would reduce this effect to less than significant.

Mitigation Measure CR-1a, now referred to as Mitigation Measure CR-1, on page 3.6-22 is hereby revised as follows:

Mitigation Measure CR-1a

Discovery of Cultural Resources during Construction (Applicability – Proposed Action and All Alternatives)

Should any cultural resources, such as structural features, any amount of bone or shell, artifacts, human remains, or architectural remains, be encountered during any subsurface development activities, work shall be suspended within 100 feet (30 feetmeters) of the find. The City of Roseville Planning and Public Works staff and the USACE staff shall be immediately notified. At that time, the City of Roseville and the USACE shall coordinate any necessary investigation of the site with qualified archaeologists as needed, to assess the resource (i.e., whether it is a historical resource, or a unique archaeological resource, or a historic property) and provide proper management recommendations should potential impacts to the resources be found to be significant or adverse. Possible management recommendations for important resources could include resource avoidance or, where avoidance is infeasible in light of project design or layout to avoid significant (adverse) effects, data recovery excavations. The

contractor shall implement any measures deemed feasible and necessary by City and USACE staff, in consultation with the archaeologists and California State Historic Preservation Officer, as appropriate, to avoid or minimize significant (adverse) effects to the cultural resources. In addition, pursuant to Section 5097.98 or the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission, located online at http://www.nahc.ca.gov/discovery.html, shall be adhered to in the treatment and disposition of the remains.

Mitigation Measure CR-1b on page 3.6-23 is deleted:

Mitigation Measure CR-1b	Archaeological Monitoring during Excavation within Creek
	Corridor
	(Applicability - Proposed Action and Alternatives 1 through 4)

For each project that entails grading or excavation within the Curry Creek or Federico Creek corridor (that is, the protected corridor that extends about 1,300 feet (396 meters) from each side of Curry and Federico Creeks), a qualified archaeologist will monitor all excavation within these corridors, from the surface to the depth at which basal hardpan is encountered. If archaeological materials are encountered, excavation and grading will stop and the procedures set forth in Mitigation Measure CR 1a above shall be implemented.

4.0 Cumulative Impacts

The first two bullet points under "Reasonably Foreseeable Future Actions under the City of Roseville General Plan" on page 4.0-7 are revised as follows:

- West Roseville Specific Plan area, to the north of Pleasant Grove Boulevard, is currently under development.
- Fiddyment Road will be widened between Baseline Road and Pleasant Grove Boulevard by
 adding two additional lanes along the Sierra Vista frontage. This project was approved by the
 City of Roseville and a DA permit was issued by the USACE to authorize 0.464 acre of fill
 associated with the roadway-widening project. The project is scheduled for construction in
 summer 2012. The project is expected to be completed in early 2013.
- Creekview Specific Plan is a proposed specific plan for the development of an approximately
 500-acre site located immediately west and north of the City's existing boundary. This project has
 yet to be approved by the City. The Specific Plan includes 2,011 residential units and additional
 area designated for open space, parks, and commercial development. An application for a DA
 permit is on file with the USACE for this project.

3.0-16

Two projects have been added beneath the first paragraph under "Reasonably Foreseeable Future Actions under the City of Lincoln General Plan" on page 4.0-8 as follows:

The City has approved the following two development projects within the study area.

- The Lincoln 270 Project would develop 117.7 acres of a 270-acre parcel of land with 47.9 acres of commercial space, 37.8 acres of light industrial, and 32 acres for medical care facilities. The approximately 120 remaining acres are non-developable and would be reserved as wildlife habitat, wetlands, and vernal pools. The City has approved the Lincoln 270 project which is in the study area and an application for a DA permit is on file with the USACE for this project.
- The Village 7 Specific Plan Project would develop 703 acres of unincorporated land, southwest of the City of Lincoln. The land would be annexed into the City of Lincoln. The project would consist of four planning areas: the Lewis property which consists of 526 acres, the Aitken Ranch II property which consists of 121 acres, the Scheiber property which consists of 26 acres, and the Remainder Area which consists of 40 acres. The project would develop a maximum of 3,285 residential units and a centrally located Village Center.

Additional information was added above "CO Concentrations" on page 4.0-29 under Cumulative Impact-AIR-1:

The above conclusion notwithstanding, conformity analysis performed for the Metropolitan Transportation Plan and Sustainable Communities Strategy 2035 (MTP/SCS) for the SACOG region (which is substantially the same as the Sacramento Valley Air Basin) shows that although the region will experience growth in population, the region's daily air pollutant emissions will decrease in the future. The conformity analysis provides the current estimates of population growth, increase in vehicle miles traveled (VMT) and daily air pollutant emissions for the region for 2014, 2017, 2018, 2025, and 2035 (SACOG 2012). The results for 2018, 2025, and 2035 are shown in Table 4.0-3, Projected Growth, Traffic and Air Pollutant Emissions.

<u>Table 4.0-3</u> <u>Projected Growth, Traffic and Air Pollutant Emissions</u>

	2018	2025	2035
<u>Population</u>	<u>2,459,000</u>	<u>2,713,000</u>	<u>3,086,000</u>
Daily VMT (1,000s of miles)	64,666	<u>69,174</u>	<u>75,658</u>
Daily NOx Emissions (tons)	<u>35.87</u>	<u>22.05</u>	<u>16.25</u>
Daily ROG Emissions (tons)	<u>24.04</u>	<u>19.17</u>	<u>15.73</u>

Note: ND – not determined

As shown above, even though population and vehicle traffic are projected to increase by 25 percent and 17 percent respectively, daily emissions of ozone precursors are expected to decrease substantially, with NOx emissions decreasing by 55 percent and ROG by 35 percent between 2018 and 2035. These population and traffic increases represent the best estimates of overall growth projections for the region

and include projects such as Sierra Vista as well as other projects in the region.

Cumulative Impact UTIL-1 and Table 4.0-3 on pages 4.0-40 and 4.0-41 are hereby revised as follows:

Proposed
Action and
Alternatives

The cumulative effect from the Proposed Action and alternatives on water supply would be mitigated but would remain significant and unavoidable. Development of the Proposed Action, along with other foreseeable future development within the City of Roseville and outside the City's current boundaries, including buildout of the City's General Plan, the Creekview Specific Plan, the Amoruso Specific Plan, and Placer Ranch Specific Plan, would exceed the City of Roseville's existing currently contracted surface water supplies. Total cumulative water demand is estimated at 65,95868,732 afy (8,1358,478 hectare-meters per year) as shown in **Table 4.0-3**, **Cumulative Water Demand**. This is 7,0589,832 afy (8701,213 hectare meters per year) more than the City's Water Forum Agreement limitation on diversions from the American River in wet/normal years of 58,900 afy (7,264 hectare meters per year), but 1,139 and 2,732 afy (140337 hectare-meters per year) lessmore than the City's total normal/wet year water supply contracts of 66,000 afy (8,140 hectare meters per year). With the additional 4,462 afy of recycled water available in combination with diversions from the American River in wet/normal years, the total water supply shortfall would be 5,370 afy (662 hectare-meters per year). Table 4.0-4 also provides the water supply shortfall that would occur in the event that the Amoruso Specific Plan and Placer Ranch Specific Plan developments were approved. With the addition of these projects awaiting approval, the total water supply shortfall would be 10,421 afy (1,286 hectare-meters per year).

Table 4.0-34 Cumulative Water Demand

Development Area	Surface Water Demand (afy)
Approved	Demand (ary)
City Buildout Demand	54,757 <u>62,695</u>
Proposed Action	3,609
Westbrook Project	<u>934</u>
Sierra Vista Urban Reserves* (Chan Property)	1,096 <u>164</u>
Creekview Specific Plan	787
Regional University Reason Farms Panhandle	543
Amoruso Specific Plan	1,210
Placer Ranch Specific Plan	3,956
Total Demand	65,958 <u>68,732</u>
Total Water Contracts	66,000
American River Allocation per WFA (Normal/Wet Years)	58,900
Recycled Water	<u>4,462</u>
Total Supply	63,362
Near Term American River Shortfall (afy)	7,058 <u>5,370</u>
Projects Awaiting Approval	
Amoruso Specific Plan	<u>1,210</u>
Placer Ranch Specific Plan	<u>3,956</u>
Long Term American River Shortfall (afy)	<u>10,536</u>

Source: City of Roseville 2010a; City of Roseville 2012; Mackay & Somps 2011

*Includes Westbrook and Chan Property

Because the pace and timing of regional developments in the study area is currently unknown, and because some of the above-referenced pending projects currently contemplated by the City's General Plan may never come to fruition, the specific additional water supplies and the timing for obtaining them to serve potential future projects are uncertain. In addition to the City's full use of its Water Forum Agreement allocation of surface water from the American River, it is likely that future water supply would come from one or more of the following sources: additional cooperative agreements between Water Forum Agreement water purveyors for surface water from the American River, mandatory conservation measures, and new surface water supplies from the Sacramento River. The PCWA intends to pursue a new water supply source from the Sacramento River to address demands from full buildout within the service area. The PCWA began the initial environmental studies necessary for the proposed water diversions from the Sacramento River in 2003, but the plans were put on hold. The City

may partner with the PCWA to pursue the new water supply source.

Furthermore, because the City's surface water supply under the Water Forum Agreement is insufficient to meet all demands during drier water years, the City's cumulative buildout demand (defined in this context to go beyond the current General Plan boundary) would require additional groundwater withdrawals in years when the surface supply is projected to be insufficient to fully meet the demand. Future urban growth would result in additional demands for surface and groundwater in the project area. Future water demands, as developed from community General Plan scenarios and other land use projections, are considered in the water supply operations model used for Central Valley Project (CVP) and State Water Project (SWP) for planning purposes. However, there are several large water supply projects that have not been assessed through the current water supply operations modeling (i.e., California Department of Water Resources CALSIM II model) in a comprehensive manner. Additionally, there has been no comprehensive assessment of the future cumulative conditions that addresses new federal rules to protect endangered species, which directly and indirectly influence regional water supplies through obligations imposed on the integrated CVP/SWP operations. Climate change also may result in additional uncertain effects to future water supply conditions and CVP/SWP operations. In short, the CVP/SWP system is facing an unprecedented level of uncertainty that makes it impossible for lead agencies such as the USACE to predict the future without a great deal of speculation.

While water demand associated with buildout of the City's General Plan and the Proposed Action would be supplied by existing and assured sources of water, and as a matter of policy, the City of Roseville will not approve new specific plans or other projects absent sufficient water for buildout of such plans and projects, any increase in water demand in a region that does not have adequate and assured water supplies for cumulative development has the potential to result in a **significant** cumulative impact on water resources. No mitigation measure that is within the control of the USACE is available to address the potentially significant cumulative impact. Therefore the effect would be **significant and unavoidable**.

A reference has been added to "Section 4.4 References" as follows:

<u>City of Roseville. 2012. "Water Supply Assessment for the Sierra Vista Specific Plan Westbrook Amendment." March.</u>

- City of Roseville. 2010a. Final Environmental Impact Report for the Sierra Vista Specific Plan.
- Gibson & Skordal, LLC. 2010. "Technical Memorandum: Sierra Vista Specific Plan Rational For Determining Extent of Fair Shrimp Habitat."
- Gibson & Skordal, LLC. 2012. Memorandum dated May 18, 2012 from Tom Skordal to James Robb, Regulatory Division, USACE (documenting the revised direct impacts of the Proposed Action and applicant-proposed mitigation).
- Placer County Air Pollution Control District (PCAPCD). 2012. "CEQA Air Quality Handbook." October.
- Sacramento Area Council of Governments (SACOG). 2012. "Metropolitan Transportation Plan/Sustainable Communities Strategy 2035." April.

5.1 U.S. ARMY CORPS OF ENGINEERS

Name	Title	Experience
Nancy A. Haley	Chief, California North Branch, Regulatory	20 years USACE Environmental
James T. Robb	Senior Project Manager	3 years USACE Environmental
Kathy Norton	Ecologist/Senior Project Manager	24 years USACE Environmental
Erin Hess	Cultural Resources Specialist	12 years USACE Environmental

5.2 IMPACT SCIENCES, INC.

Name	Qualifications	Participation
Shabnam Barati	B.A., M.A, M.Phil., Ph. D., 24 years of experience	Project Manager
Sara Morton	B.S., 6 years of experience	Deputy Project Manager, Project Description, Cultural Resources, Geology, Soils, and Minerals, Hazards and Hazardous Materials, Hydrology and Water Quality, Utility and Service Systems
Paul Stephenson, AICP	B.S., M.A., 8 years of experience	Deputy Project Manager, Aesthetics, Agricultural Resources, Land Use, Transportation and Traffic, Response to Comments
Daryl Koutnik	B.A., M.S., Ph.D., 25 years of experience	Biological Resources
Jennifer Millman	B.S., 4 years of experience	Environmental Justice , Noise, Public Services, Appendix C Alternative 4 Water Supply Pipeline Analysis
Caitlin Gilleran	B.S., 3 years of experience	Cumulative, Response to Comments, Errata
Eric Bell	B.S., M.S., 5 years of experience	Air Quality, Climate Change, Appendix A General Conformity Analysis
Ian Hillway	B.S., 16 years of experience	Editing, Production, Graphics

5.3 SUBCONSULTANTS

Name	Qualifications	Participation
David M. Tokarski, DKS Associates	B.S., M.S., 16 years of experience	Transportation and Traffic
Sally Morgan, Independent Contractor	B.A., M.A., 37 years of experience	Cultural Resources
Jeff Glazner, Salix Inc.	B.S., 22 years of experience	Biological Resources
Matt Fremont, Helix Environmental	B.A., M.A., 10 years of experience	Biological Resources (GIS)





General Permit 04

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

Sierra Vista Specific Plan Infrastructure Roseville, California

EFFECTIVE DATE: <<DATE>>2013

EXPIRATION DATE: << DATE>>2018

ISSUING OFFICE: U.S. Army Corps of Engineers, Sacramento District, Regulatory Division,

1325 J Street, Room 1350, Sacramento, California 95814-2922

<u>ACTION ID</u>: SPK-2006-01050

PERMITTEE: Sierra Vista Specific Plan Property Owners, Placer County, California.

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the issuing office of the Corps of Engineers having jurisdiction over the permitted activity.

After you receive written verification for your project under this Regional General Permit (RGP) from this office, you are authorized to perform that work in accordance with the terms and conditions and any project-specific conditions specified below.

PURPOSE: The purpose of the RGP is to provide a simple and expeditious means of transferring the Section 404 authorization for the construction of backbone infrastructure. The Corps of Engineers has issued ten individual permits comprising the Sierra Vista Specific Plan (SVSP) project. Each of these individual permits includes the backbone infrastructure located within the property boundaries of the respective permits (on-site). The only SVSP backbone infrastructure not located on-site is the extension of Westbrook Boulevard and the widening of Baseline Road. Both of these off-site infrastructure segments are included on separate Department of the Army permit applications for projects adjoining SVSP (Westbrook and Placer Vineyards, respectively). Each permittee is required by local development agreements to provide certain segments of the backbone infrastructure if they are not already in place. Depending on the timing and sequence of development, some of the infrastructure needed by a particular permittee may be located on-site on a separate property authorized by a separate individual permit or off-site. In cases where the required infrastructure is located on a separate property covered by a separate individual Department of the Army permit or is located off-site, this RGP allows the transference of the authority to construct segments of that infrastructure, as needed. Except for the offsite infrastructure, this RGP does not authorize any work not already authorized by the ten individual permits but it allows flexibility to accommodate undetermined project implementation schedules, chronology and phasing. (See Exhibit A.)

LOCATION: This RGP is restricted to the SVSP project area. The SVSP is located in the western portion of the City of Roseville, north of Baseline Road, west of Fiddyment Road, and south of the West Roseville Specific Plan Area (see attached drawings Figures 1 & 2). This approximately 1625.13-acre site is located on Curry Creek, in Sections 25 – 27 and 34 - 36, Township 11 North, Range 5 East, MDB&M, Latitude 38.762166°, Longitude -121.38376°, City of Roseville, in Placer County, California.

<u>AUTHORITY</u>: This RGP authorizes activities within the SVSP project area incidental to construction of the backbone infrastructure that involve discharges of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act.

ACTIVITIES AUTHORIZED BY THIS REGIONAL GENERAL PERMIT: This RGP authorizes specific structures and work associated with construction of the backbone infrastructure associated with the SVSP project. This RGP does not authorize any work other than that backbone infrastructure and does not authorize any changes in the scope or nature of that backbone infrastructure. The structures and work authorized by this RGP are shown on the attached documents Exhibit A and Figure 3.

TERMS OF AUTHORIZATION:

1. Applying for RGP Authorization. Prior to commencing work on a proposed segment of backbone infrastructure requiring authorization by the RGP, applicants seeking such authorization shall notify the Corps in accordance with RGP General Condition Number 12 (Notification). If the Corps determines the activity does not comply with the terms and conditions of the RGP, the Corps will notify the applicant in writing within thirty (30) calendar days that the RGP authorization will not be granted, citing the specific reasons the work does not comply with the terms and condition of this RGP. If the Corps determines the work does comply with the terms and conditions of the RGP, the Corps will notify the applicant of such within 30 days of receipt of a complete application.

If the work would involve potential impacts to federally-listed branchiopods, the Corps will so notify the applicant within 30 days of receipt of the notification and concurrently request the U.S. Fish and Wildlife Service (USFWS) to append the work to the programmatic biological opinion. In such cases, authorization under this RGP will not be granted until the USFWS has appended the infrastructure segment(s) to the programmatic biological opinion.

If the Corps does not provide a written response to the applicant within 30 days of receipt of a complete notification and the infrastructure segments do not involve potential impacts to federally-listed branchiopods, the applicant may not presume that the proposed activity is authorized under the RGP, and must wait to hear from the Corps that the activity complies with all other terms and conditions of the RGP.

2. <u>Impact Limitations for Waters of the U.S.</u> The impacts to waters of the United States resulting from construction of each segment of backbone infrastructure shall not exceed the impacts

- authorized for said infrastructure segments in each of the individual permits issued for the SVSP project. Those impacts are listed on the attached Exhibit B and shown in Figure 2.
- 3. <u>After-the-fact Projects</u>. This RGP may not be used to authorize activities that were constructed without the required authorization of a Department of the Army permit.
- 4. <u>Activity Completion</u>. Any activity authorized by the Corps under this RGP must be completed prior to the expiration date of this RGP unless specifically extended by the Corps on a case-by-case basis. Activities that have been authorized under this RGP that are under construction or under contract of construction in reliance on this authorization will remain authorized provided the activity is completed within 12 months of the date of the RGP's expiration, modification or revocation, unless the Corps exercises its discretionary authority to modify, suspend or revoke the authorization of a specific activity.
- 5. Expiration of RGP. This RGP is valid for five (5) years from the date of issuance (or reissuance). At least sixty (60) calendar days prior to the expiration date of this RGP, the Corps will issue a public notice with an opportunity for public comment, describing the reasons for reissuing the RGP, reissuing the RGP with modifications, or not reissuing the RGP for another five years. The Corps may extend the RGP for six months beyond the expiration date if it is unable to reissue the RGP due to unresolved issues. If the Corps has not reissued or extended the RGP by the expiration date, the RGP will no longer be valid. This RGP, or any specific authorizations granted under this RGP, may also be modified, suspended or revoked by the Corps at any time deemed necessary. In such instance, the Corps will issue a public notice concerning the action.

GENERAL CONDITIONS:

The following conditions apply to all work authorized by this RGP.

- 1. <u>Site Status</u>. The permittee is responsible for this authorized activity until it is transferred to the City of Roseville. Therefore, you must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity. Should you wish to cease to maintain the authorized activity or should you desire to abandon it, you must first obtain a modification of this permit from this office, which may require restoration of the area and additional compensation as seen fit by this office to ensure that the site may be adequately maintained in perpetuity.
- 2. <u>Clean Fill</u>. Fill material must be clean and free of contaminants and noxious plants. Fresh cement or concrete is not allowed in waters unless it is placed in sealed forms. Unsuitable fill material includes vehicle bodies, farm machinery, appliances and other metal objects, asphalt, biodegradable construction debris and tires, concrete with exposed rebar.
- 3. <u>Endangered Species Consultation</u>. This Corps permit does not authorize you to take an endangered species, in particular **[SPECIES (Species species)]**, or designated critical habitat. In order to legally

take a listed species, you must have separate authorization under the Endangered Species Act (e.g., an Endangered Species Act Section 10 permit, or a Biological Opinion under Endangered Species Act Section 7, with "incidental take" provisions with which you must comply). The enclosed Fish and Wildlife Service Biological Opinion (Number **[XXXX]**, dated **[XXXX]**), contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the Biological Opinion**[s]**. Your authorization under this Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with "incidental take" of the attached Biological Opinion**[s]**, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the Biological Opinion**[s]**, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your Corps permit. The U.S. Fish and Wildlife Service is the appropriate authority to determine compliance with the terms and conditions of its/their Biological Opinion**[s]**, and with the Endangered Species Act. You must comply with all conditions of this/these Biological Opinion**[s]**, including those ascribed to the Corps.

- 4. Water Quality Certification. Section 401 water quality certification is required for all activities to be authorized by this RGP. The Central Valley Regional Water Quality Control Board (CVRWQCB) has issued a programmatic water quality certification for the activities authorized by this RGP. Each permittee must submit a notice of intent (NOI) to the CVRWQCB and receive its approval to construct the infrastructure under the programmatic water quality certification prior to beginning work in waters of the United States authorized by this RGP. The permittee shall comply with all terms and conditions of the Water Quality Certification.
- 5. Unanticipated Cultural Resource Discoveries. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you shall immediately notify the Corps of what you have found. Should any cultural resources, such as structural features, any amount of bone or shell, artifacts, human remains, or architectural remains, be encountered during any subsurface development activities, work shall be suspended within 100.0 feet of the find. The City of Roseville Planning and Public Works staff and the Corps shall be immediately notified. At that time, the City of Roseville and the Corps will coordinate any necessary investigation of the site, with qualified archaeologists as needed, to assess the resource (i.e. whether it is a historical resource, a unique archaeological resource, or a historic property) and provide proper management recommendations should potential impacts to resources be found to be significant or adverse. Possible management recommendations for important resources could include resource avoidance or, where avoidance is infeasible in light of project design or layout to avoid significant (adverse) effects, data recovery excavations. The contractor shall implement any measures deemed feasible and necessary by the City and Corps staff, in consultation with the archaeologists and California State Historic Preservation Officer, as appropriate, to avoid or minimize significant (adverse) effects to cultural resources. In addition, pursuant to Section 5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.

- 6. <u>Best Management Practices</u>. Best Management Practices (BMPs) must be employed during construction and in project design to protect water quality and minimize impacts of storm water runoff on aquatic resources. BMPs should be appropriately located in or adjacent to waters of the United States (e.g., silt curtains). The applicant shall employ the following BMPs, as appropriate, in designing and constructing the project. The applicant shall describe which BMPs are practicable as part of the notification procedure as per General Condition Number 12 and this General Condition Number 6:
 - a. Preservation of natural resource features on the project site as identified in Figure 4 (e.g., floodplains, wetlands, streams, and other drainage ways, grasslands, woodlands, and native soils);
 - b. Preservation of natural water infiltration and storage characteristics of the site;
 - c. Minimization of new impervious surfaces in project design (impervious surfaces may be minimized through practices such as reducing road widths and clustering developments designed around open space);
 - d. Structural measures that provide water quality and quantity control,
 - e. Structural measures that provide only quantity control and conveyance,
 - f. Construction BMPs include: matting and filter fencing, or other barrier methods to intercept/capture sediment. Heavy equipment working in wetlands must be placed on mats, or employ other measures such as low ground pressure equipment, must be implemented to minimize soil disturbance.
- 7. <u>Proper Maintenance</u>. Any authorized infrastructure shall be properly maintained, including maintenance necessary to ensure public safety and the movement of aquatic organisms at all times.
- 8. <u>Aquatic Life Movements</u>. No activity may substantially disrupt the necessary life cycle movement of aquatic species indigenous to the water body, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low-flow conditions, and should be designed as open-bottom culverts.
- 9. <u>Suitable Material</u>. No discharge of dredged or fill material may consist of unsuitable material and material discharged must be free from toxic pollutant in toxic amounts (Section 307 of the Clean Water Act). Unsuitable material includes, but is not limited to, trash, debris, car bodies, and asphalt.
 - a. You shall use only clean and nontoxic fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, and concrete with exposed reinforcement bars, and soils contaminated with any toxic substance, in toxic amounts in accordance with Section 307 of the Clean Water Act. In addition, you shall allow all newly poured concrete to cure for a minimum of seven days prior to coming into contact with open water.

- 10. <u>Removal of Temporary Fills and Restoration of Affected Areas</u>. Temporary fills shall be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas shall be re-vegetated with native and/or naturalized species common in the adjacent grasslands upon completion of the work. Temporary fills may not last more than three months within waters of the United States, including wetlands.
- 11. <u>Compensatory Mitigation</u>. Mitigation for impacts to waters of the United States must be accomplished to the mitigation amounts specified for each segment of backbone infrastructure (see Exhibit B and Figure 4).
 - a. Where the mitigation involves purchase of credits from an approved mitigation bank, these credits must be purchase and proof of purchase must be provided to the Corps prior to commencing the activity authorized by the RGP.
 - b. Where the mitigation involves creation of wetlands on-site, construction of the wetlands must begin concurrently with construction of the infrastructure segment(s) authorized by this RGP and must be completed within twelve months from the start of construction of the mitigation. Specific sections of on-site mitigation must be constructed and completed in their entirety.
 - c. If the permittee elects to use permittee-sponsored mitigation, the mitigation and monitoring plan for the permittee-sponsored mitigation must be prepared, submitted to, and approved by, the Corps prior to initiating construction of the infrastructure segment(s) authorized by this RGP. Submittal and approval of the permittee-sponsored mitigation and monitoring plan must be completed prior to receiving authorization under this RGP.
 - d. You shall develop a final comprehensive mitigation and monitoring plan, which must be approved by the Army Corps of Engineers prior to initiation of construction activities within waters of the United States. The plan shall include mitigation location and design drawings, vegetation plans, including target species to be planted, and final success criteria, and shall be presented in the format of the Sacramento District's Habitat Mitigation and Monitoring Proposal Guidelines, dated December 30, 2004. The purpose of this requirement is to ensure replacement of functions of the aquatic environment that would be lost through project implementation.
- 12. <u>Notification</u>. The applicant shall provide written notification requesting authorization under this RGP prior to commencing work. The Corps' receipt of the complete notification is the date when the Corps receive all required notification information from the applicant (listed below). Written notification shall include all of the following.

- a. A letter signed by the applicant requesting authorization under the RGP including the specific segment(s) of backbone infrastructure to be constructed and the area (in square feet and acres) of waters of the United States that will be impacted.
- b. The estimated start and completion date for the infrastructure segments to be constructed.
- c. A vicinity map showing the infrastructure segments to be constructed in relation to the overall SVSP project and a plan drawing(s) showing the infrastructure segment(s) relative to existing waters of the United States. Where the infrastructure would involve a crossing of waters of the United States, the applicant will also include a cross-section drawing depicting the crossing relative to existing waters of the United States.
- d. A tabulation of the direct and indirect effects (both permanent and temporary) and the required mitigation associated with the infrastructure segments (see Exhibit B). Where the required mitigation involves purchase of credits from an approved mitigation bank, the notification must include proof of purchase of the required credits. Where the mitigation associated with the infrastructure segments requires construction of wetlands on-site, the notification must clearly identify which segment(s) of wetlands will be constructed, what portion of the mitigation constructed (in acres) will be applied to the infrastructure segment for which authorization is being requested, and, if applicable, what portion (in acres) of the mitigation constructed will be available for satisfying other SVSP mitigation requirements.
- e. If the mitigation involves permittee-sponsored mitigation and if the mitigation and monitoring plan for that mitigation has not been previously approved by the Corps, it must be included as part of the notification.
- f. Representative color ground photographs taken of the site including the wetland areas.
- 13. <u>Reporting Responsibilities</u>. The permittee must submit a report to the Corps within 30 days of completion of the work authorized by this RGP. The completion report will contain the following:
 - a. The Corps' file number.
 - b. Photographs showing the pre- and post-construction project conditions; Color ground photographs of the completed work. The cameral positions and view-angles of the ground photographs shall be identified on a map, aerial photograph, or project drawing. Copies of these photographs shall be submitted within the paper report and as a copy digital copy.
 - c. A completed compliance certificate.
 - d. As-built drawings and a description of the work conducted on the project site, within the on-site and/or off-site compensatory mitigation, or preservation, or avoidance area(s) to

- this office for review. The drawings shall be signed and sealed by a registered professional engineer and the biological monitor that oversaw the construction of the work.
- e. A plan view drawing of the location of the authorized work footprint (as shown on the permit drawings) with an overlay of the work as constructed in the same scale as the attached permit drawings. The drawing should show all "earth disturbance," wetland impacts, structures, and the boundaries of any on-site and/or off-site mitigation or avoidance areas. The drawings shall contain, at a minimum, 1-foot topographic contours of the entire site.
- 14. <u>Access</u>. The permittee must allow representatives from the Corps to inspect the authorized activity at any time deemed necessary to ensure that the work is being or has been accomplished in accordance with the terms and conditions of this RGP.
- 15. <u>Awareness Responsibility</u>. You are responsible for all work authorized herein and ensuring that all contractors and workers are made aware and adhere to the terms and conditions of this permit authorization. You shall ensure that a copy of the permit authorization and associated drawings are available for quick reference at the project site until all construction activities are completed.
- 16. Construction Monitoring. You shall employ a qualified wetland scientist, who is familiar with vernal pools, to continuously monitor construction activities in the vicinity of waters of the United States to ensure against unauthorized activity occurring during construction. This monitor shall be on-site during all construction activities where waters of the United States are being filled and when construction is occurring within 250.0-feet of any preserved, and/or avoided, waters of the United States. If unauthorized activities do occur into waters of the United States, the monitor shall have the authority to stop work within waters of the United States immediately and notify our office at once. This monitor shall educate the construction workers about the sensitivities of the wetlands on-site, and the rare species of the area before work begins.
- 17. <u>Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act.</u> Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable. An activity authorized under this RGP does not authorize the "take" of a migratory bird, including bald and golden eagles, as defined under the Federal Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.
- 18. <u>Federal Fish and Wildlife Coordination Act</u>. All terms and conditions of the Fish and Wildlife Coordination Act shall be met for any project authorized under this RGP.
- 19. <u>On-site Stream Flows.</u> The project must not permanently restrict or impede the passage of normal or expected high flows in the watercourse.

LIMITATIONS AND RESTRICTIONS:

- 1. The Corps has authority to determine if an activity complies with the terms and conditions of the RGP.
- 2. This RGP does not obviate the need to obtain other Federal, state, or local permits, approvals, or authorizations required by law.
- 3. This RGP does not grant any property rights or exclusive privileges.
- 4. This RGP does not authorize any injury to the property or rights of others.
- 5. This RGP does not authorize interference with any existing or proposed Federal project.

DEFINITIONS:

<u>Activity</u> is any discharge of dredged or fill material into waters of the United States under Section 404 of Clean Water Act.

Applicant is the individual, organization, or company requesting authorization under the RGP.

<u>Authorization</u> is written verification by the Corps that an activity qualifies for, and may proceed under, the RGP provided all terms and conditions of the RGP are followed.

<u>Compensatory mitigation</u> is the restoration, establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

<u>Complete application</u> is all required notification materials that must be submitted by the applicant to the Corps, as listed in General Condition Number 12. If all materials are not submitted, the application is considered incomplete and will not be processed under the RGP.

General conditions are RGP conditions that would apply to all activities authorized by this RGP.

<u>Historic properties</u> are as defined in 36 CFR Part 800.16(l). It means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.

<u>Impact</u> is the direct and indirect loss of waters of the U.S., including wetlands, which results from implementation the activity.

<u>Indirect impact</u> is an impact that is caused by the activity, occurs later in time and is reasonably certain to occur. For purposes of this RGP, indirect effects refer to suitable habitat for listed branchiopods occurring in occupied watersheds located within 250 feet of the edge of the backbone infrastructure.

<u>Listed branchiopods</u>, for purposes of this RGP, are federally-listed species of branchiopods which have been documented as occurring in or near the SVSP project area. They include vernal pool fairy shrimp (*Branchinecta lynchi*) and vernal pool tadpole shrimp (*Lepidurus packardi*).

Loss of waters of the United States. This refers to waters that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredge or fill material that change an aquatic area to dry land, increase the bottom elevation of a water body, or change the use of an aquatic feature. The acreage of loss of waters of the U.S. is a threshold measurement of the impact to jurisdictional waters for determining if the project may qualify for the RGP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services.

Mitigation see "compensatory mitigation" definition.

<u>Mitigation bank</u> is a site where aquatic resources (e.g., wetlands, streams) are restored, established, enhanced, and/or preserved for the purpose of providing compensatory mitigation for impacts authorized by DA permits.

<u>Notification</u> is the submission of required information by the applicant to the Corps for a complete application.

On-site means located within one or more of the nine properties comprising the SVSP.

Off-site means located within the SVSP but not within one or more of the properties comprising the SVSP.

<u>Permittee</u> is an entity that has received authorization to conduct activities in waters of the United States under this RGP.

<u>Permittee-responsible mitigation</u> refers to a type of compensatory mitigation as defined in 33 CFR Part 332.2, entailing aquatic resource restoration, establishment, enhancement, and/or preservation activity undertaken by the permittee (or an authorized agent or contractor) to provide compensatory mitigation for which the permittee retains full responsibility.

<u>Project site</u> is the land, including waters of the U.S. and uplands, utilized for a single and complete project. The project site includes the land cleared, graded, and/or filled to construct the single and complete project, including any buildings, utilities, storm water management facilities, roads, yards, and other attendant features. Temporary construction areas (e.g., access and staging) are included. The

project site also includes any other land and attendant features that are used in conjunction with the single and complete project, such as open space, roads and utilities.

<u>Single and complete project</u> is the "total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers" (33 CFR 330.2[i]).

<u>Special conditions</u> are conditions added by the Corps for projects on a case-by case basis to ensure an activity has minimal impacts on aquatic resources and complies with the RGP. The Corps' authority to require special conditions is provided in 33 CFR Part 325.4(a).

<u>Suspension</u> is the temporary cancellation of the authorization while a decision is made to modify, revoke or reinstate the authorization.

<u>Terms and conditions</u> are the parameters, including thresholds, limitations and requirements, for completing an activity under the RGP. These parameters are described in each Activity category and in the General Conditions. Special conditions may also be added by the Corps on individual authorizations to ensure an activity has minimal individual and cumulative impacts.

<u>Waters of the United States</u> are as defined in 33 CFR Part 328.3(a). For purposes of wetlands regulated under Section 404 of the Clean Water Act under this RGP, the identification and delineation of wetlands must be in accordance with the most recent guidance and wetland delineation manual and manual supplement issued by the Corps.

Definitions found at 33 CFR Parts 320-323, 325-329, and 331-332 and 40 CFR Part 230 are also applicable to this RGP and are incorporated by reference herein.

REEVALUATION: This office may reevaluate its decision on this permit, or on the verification that any particular activity qualifies for this RGP, at any time circumstances warrant review as determined by this office. Circumstances that could require a reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you proves to have been false, incomplete, or inaccurate.
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedure provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may, in certain situations (such as those specified in 33 CFG 209.170), accomplish the corrective measures by contract or otherwise and bill you for the cost.

<u>CONTACTS AND ADDITIONAL INFORMATION</u>: For additional information, about RGP 04, please contact the U.S. Army Corps of Engineers, Sacramento District at the address below, phone number (916) 557-5250.

ATTACHMENTS: Included at the end of this document. (Four Figures and two Exhibits.)

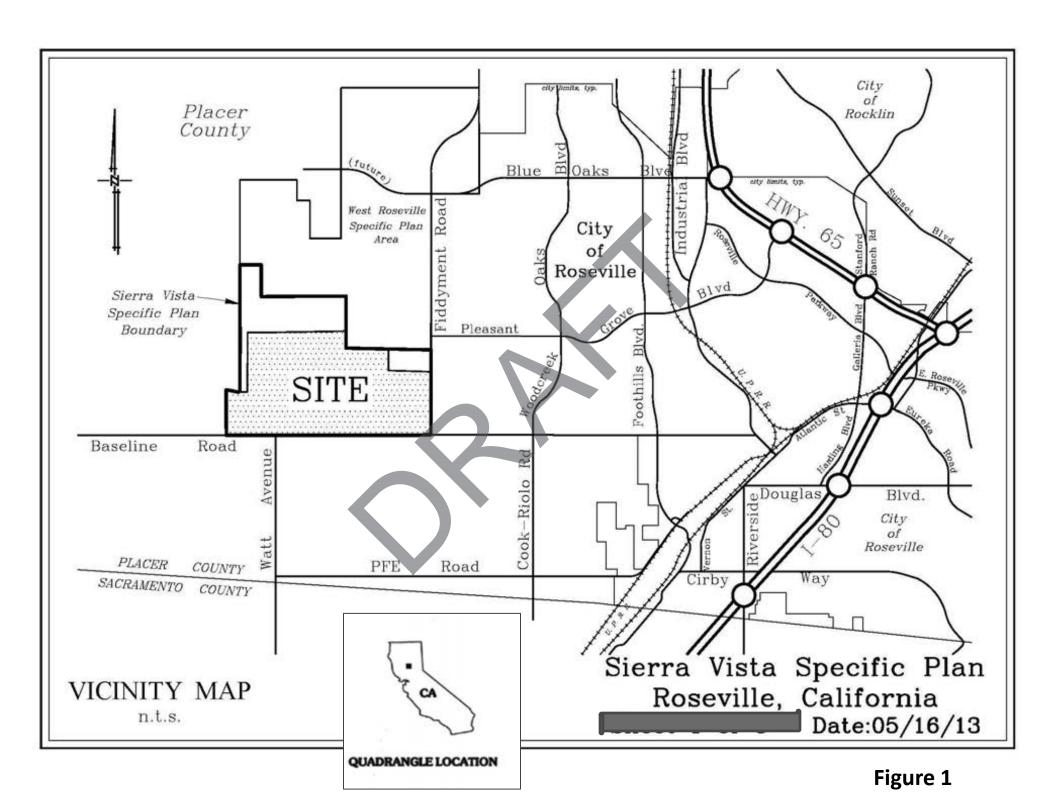
This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

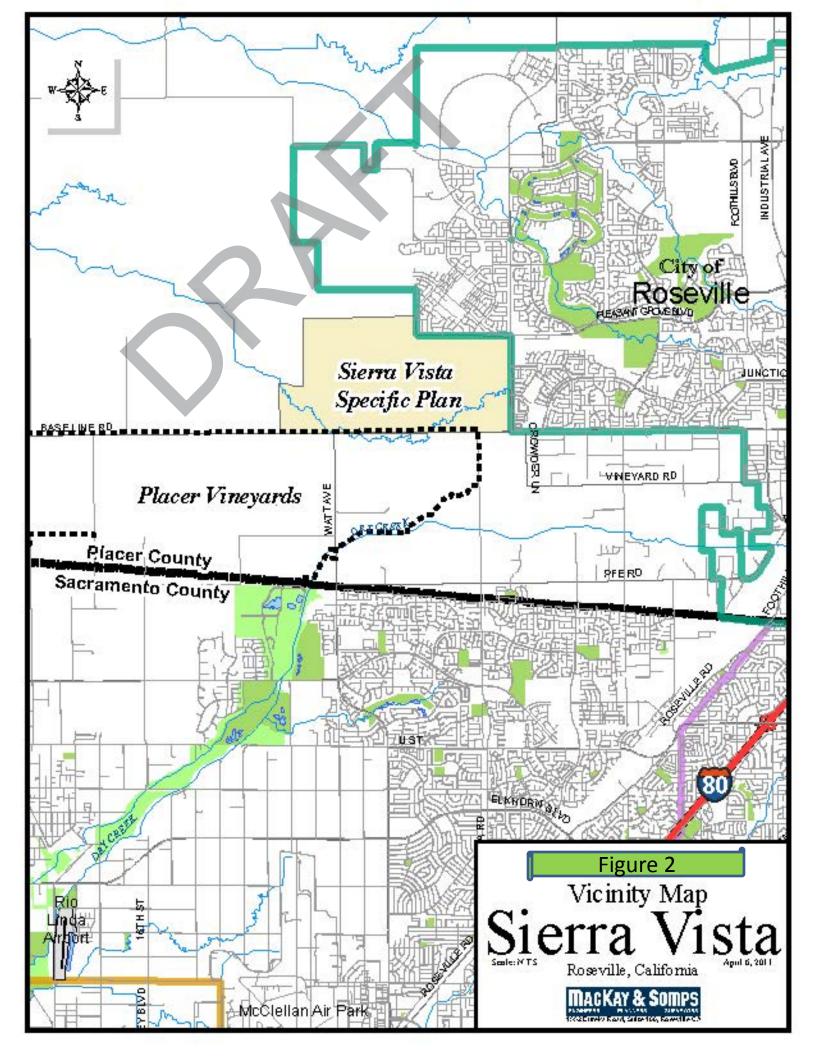
Michael S. Jewell		Date	
Chief, Regulatory Division Sacramento District			
Sucrumento District			

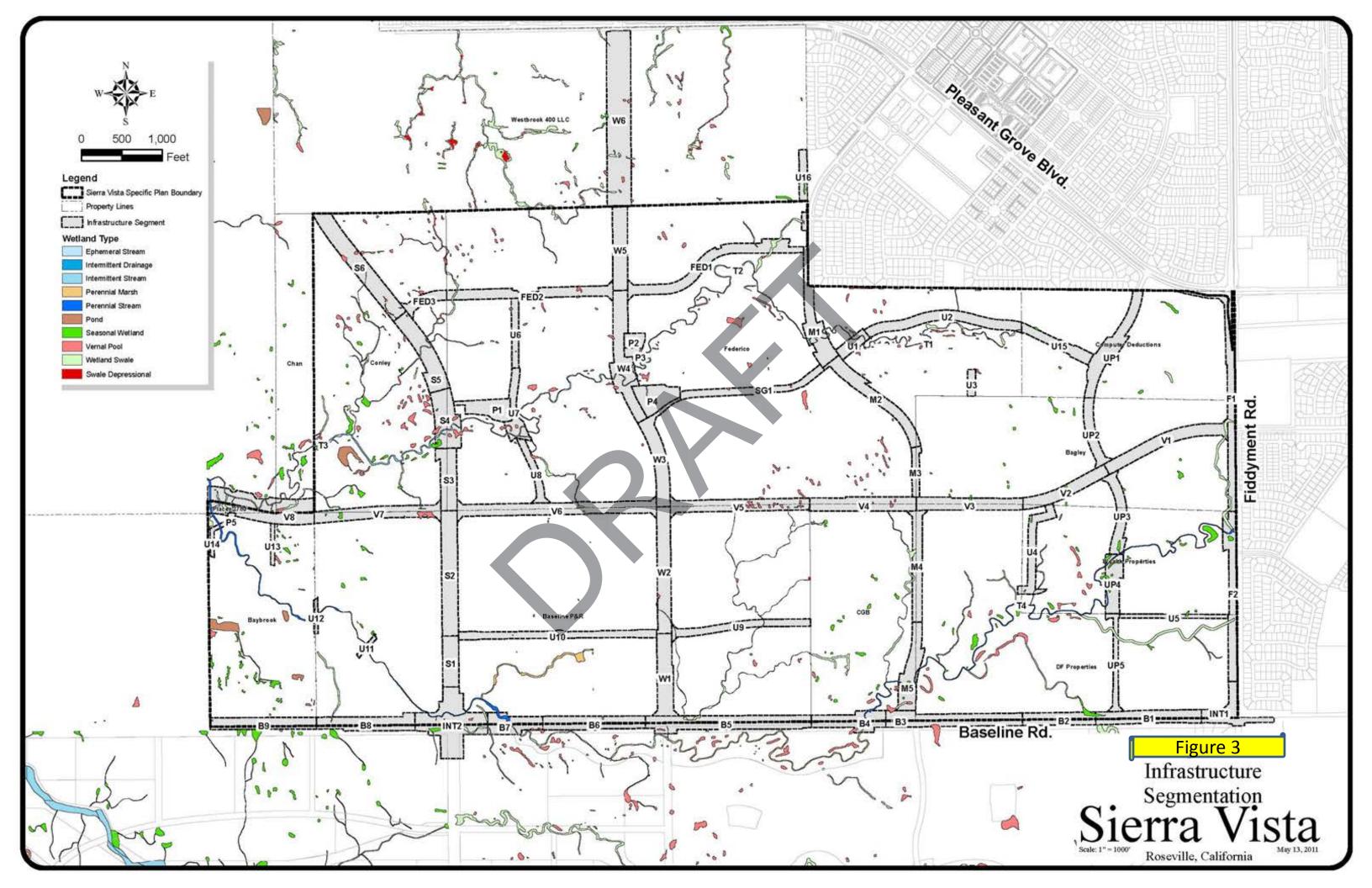
TRANSFER:

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

Name (Print)	Date
Title	
Address	
Signature: Transferee	







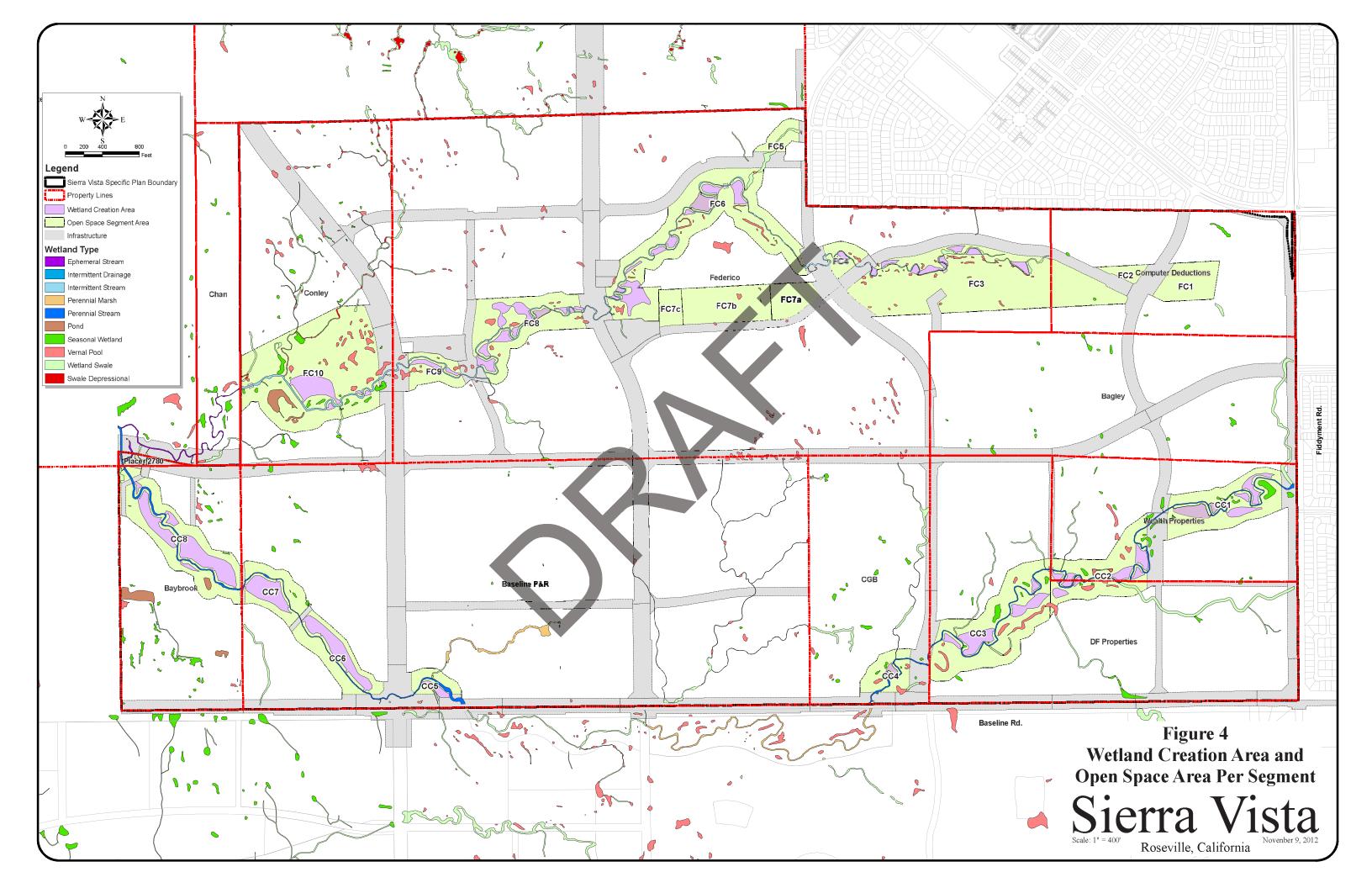


Exhibit A – Backbone Infrastructure

The proposed RGP would authorize construction of discreet segments of backbone infrastructure that are also associated with the Sierra Vista Specific Plan (SVSP). For purposes of this RGP, backbone infrastructure is that portion of the SVSP infrastructure that serves, and/or is located on, two or more of the properties that comprise the SVSP. It does not include infrastructure that is located wholly on and serves only one of the properties. The backbone infrastructure includes major roadways along with their attendant features, utility lines, stormwater drains and associated outfalls, water quality treatment facilities, detention facilities, trails, a potable water storage facility, an electric substation, a fire station and on-site wetland creation.

The backbone infrastructure has been divided into discreet segments that must be constructed as a whole. These segments are shown on the Exhibits B and C. Exhibit D is a table listing all of the backbone infrastructure segments that would impact waters of the U.S., their impacts and the corresponding proposed mitigation. The following is a discussion of the various components of the backbone infrastructure, their segments, the impacts and the corresponding proposed mitigation.

Major Roads

There are seven new major roads included in the backbone infrastructure. The north-south roads include Santucci Boulevard, Westbrook Boulevard, Market Street and Upland Drive. Major east-west roads include Federico Drive, Sierra Glen Drive, and Vista Grande Boulevard. In addition to these new roads, one existing north-south road (Fiddyment Road) and one existing east-west road (Baseline Road) would be widened. There will also be two improved intersections. All of these roads will have buried utility lines and storm drains within their footprints.

Santucci Drive is divided into six discreet segments (S1 – S6, see Exhibit B). Cumulatively, Santucci Drive will impact 1.0952 acres of waters of the U.S. comprised of and the proposed mitigation for these impacts is 0.6375 acre of on-site creation 1.5864 acre of off-site preservation, and 0.7152 acre of off-site restoration/creation (see the table at Exhibit D for a breakdown of these impacts and proposed mitigation by segment).

Westbrook Boulevard is divided into five discreet segments (W1 – W6, see Exhibit B). Cumulatively, Westbrook Boulevard will impact 0.5965 acre of waters of the U.S. and the proposed mitigation for these impacts is 0.4755 acre of on-site creation, 0.6553 acre of off-site preservation, and 0.3130 acre of off-site restoration/creation (see the table at Exhibit D for a breakdown of these impacts and proposed mitigation by segment).

Market Street is divided into five discreet segments (M1 - M5, see Exhibit B). Cumulatively, Market Street will impact 0.5103 acre of waters of the U.S. and the proposed mitigation for these

impacts is 0.6737 acre of on-site creation, and 0.1087 acre of off-site restoration/creation (see the table at Exhibit D for a breakdown of these impacts and proposed mitigation by segment).

Upland Drive is divided into five discreet segments (UP1 – UP5, see Exhibit B). Cumulatively, Upland Drive will impact 0.6696 acre of waters of the U.S. and the proposed mitigation for these impacts is 1.1233 acre of on-site creation (see the table at Exhibit D for a breakdown of these impacts and proposed mitigation by segment).

Federico Road is divided into two discreet segments (F1 and F2, see Exhibit B). Cumulatively, Federico Road will impact 0.3785 acre of waters of the U.S. and the proposed mitigation for these impacts is 0.4909 acre of on-site creation, 0.1716 acre of off-site preservation, and 0.0858 acre of off-site restoration/creation (see the table at Exhibit D for a breakdown of these impacts and proposed mitigation by segment).

Sierra Glen Drive is one discreet segment (SG1, see Exhibit B). Sierra Glen Drive will impact 0.0275 acre of waters of the U.S. and the proposed mitigation for these impacts is 0.0275 acre of off-site restoration/creation (see the table at Exhibit D for a breakdown of these impacts and proposed mitigation by segment).

Vista Grande Boulevard is divided into eight discreet segments (V1 – V8, see Exhibit B). Cumulatively, Vista Grande Boulevard will impact 2.0664 acre of waters of the U.S. and the proposed mitigation for these impacts is 2.1166 acres of on-site creation, 0.8924 acre of off-site preservation and 0.8047 acre of off-site restoration/creation (see the table at Exhibit D for a breakdown of these impacts and proposed mitigation by segment).

Baseline Road is divided into nine discreet segments (B1 – B9, see Exhibit B). Cumulatively, Baseline Road will impact 1.3345 acres of waters of the U.S. and the proposed mitigation for these impacts is 1.1135 acres of on-site creation, 5.3173 acres of off-site preservation and 0.6707 acre of off-site restoration/creation (see the table at Exhibit D for a breakdown of these impacts and proposed mitigation by segment).

There are two intersections of existing and/or proposed roads that would be improved (INT1 and INT2, see Exhibit B). INT1 is the intersection of Baseline Road and Fiddyment Road and INT2 is the intersection of Baseline Road and Santucci Boulevard. INT1 will not directly impact waters of the U.S. INT2 will impact 0.5190 acre of waters of the U.S. and the proposed mitigation is 0.6271 acre of on-site creation, 0.2779 acre of off-site preservation and 0.1451 acre of off-site restoration/creation.

Utilities

The utility segments consist of buried transmission lines, drainage lines and surface drainage courses. In most cases, these utilities are buried under roads. Where the roads are already identified as segments of the backbone infrastructure, the utility lines are not shown as separate

infrastructure segments. Where the utility lines are not buried under a road or where that road is not part of the backbone infrastructure, the utility line is shown as separate infrastructure segments. A total of 14 of these utility line segments would impact waters of the U.S. (U1, U2, U4 – U12, and U14 – U16, see Exhibit B) for a combined impact of 0.6437 acre. The proposed mitigation is 0.5467 acre of on-site creation, 0.1555 acre of off-site preservation, and 0.1378 acre of off-site restoration/creation.

Potable Water Storage Facility

There is one potable water storage facility (P1). P1 would directly impact will impact 0.0228 acre of waters of the U.S. and the proposed mitigation is 0.0228 acre of off-site restoration/creation.

Electrical Substation

There is one electrical substation (P2) and it would not directly affect any waters of the U.S.

Recycling Center

There is one recycling center (P3). P3 would directly impact will impact 0.0344 acre of waters of the U.S. and the proposed mitigation is 0.0344 acre of off-site restoration/creation.

Fire Station

There is one fire station (P4). P4 would directly impact will impact 0.0455 acre of waters of the U.S. and the proposed mitigation is 0.0763 acre of on-site creation.

Lift Station

There is one lift station (P5). P5 would directly impact will impact 0.0030 acre of waters of the U.S. and the proposed mitigation is 0.0050 acre of on-site creation.

EXHIBIT B

BACKBONE INFRASTRUCTURE IMPACTS AND CORRESPONDING MITIGATION

Infrastructure Type	Infrastructure Segment	Impacted Habitat Type	Direct Impact (ac)	On-Site Mitigation Creation (ac)	Off-Site Mitigation Preservation (ac)	Off-Site Mitigation Restoration/Creation (ac)
Baseline Road	B1	Seasonal Wetland	0.0506	0.0849	0.0000	0.0000
		B1 Total	0.0506	0.0849	0.0000	0.0000
	B2	Seasonal Wetland	0.1857	0.3115	0.0000	0.0000
		B2 Total	0.1857	0.2 15	0.0000	0.0000
	B3	Vernal Pool	0.4804	200	0.7151	0.4804
		B3 Total	0.4804	0.0000	0.7151	0.4804
	B4	Perennial Stream	0.0880	0.1476	0.0000	0.0000
	B4	Vernal Pool	0.0901	0.0000	0.6062	0.0901
	B4	Wetland Swale	0.0010	0.0017	0.0000	0.0000
190		B4 Total	0.1791	0.1493	0.6062	0.0901
	B5	Vernal Pool	0.0323	0.0000	1.0995	0.0323
	B5	Wetland Swale	0.1054	0.1768	0.0000	0.0000
		B5 Total	0.1377	0.1768	1.0995	0.0323
	B6	Vernal Pool	0.0115	0.0000	0.5476	0.0115
		B6 Total	0.0115	0.0000	0.5476	0.0115
	B7	Perennial Stream	0.1886	0.3164	0.0000	0.0000
	B7	Vernal Pool	0.0564	0.0000	0.6935	0.0564
	B7	Wetland Swale	0.0224	0.0376	0.0000	0.0000
		B7 Total	0.2674	0.3540	0.6935	0.0564
	B8	Seasonal Wetland	0.0000	0.0000	0.4800	0.0000
	B8	Wetland Swale	0.0142	0.0238	0.0000	0.0000
		B8 Total	0.0142	0.0238	0.4800	0.0000
	B9	Seasonal Wetland	0.0079	0.0132	1.1754	0.0000
W		B9 Total	0.0079	0.0132	1.1754	0.0000
	1	Baseline Road Total	1.3345	1.1135	5.3173	0.6707
ederico Road	FED1	Wetland Swale	0.2233	0.3745	0.0000	0.0000
		FED1 Total	0.2233	0.3745	0.0000	0.0000
	FED2	Swale Depressional	0.0049	0.0000	0.0098	0.0049

EXHIBIT B

BACKBONE INFRASTRUCTURE IMPACTS AND CORRESPONDING MITIGATION

Infrastructure Type	Infrastructure Segment	Impacted Habitat Type	Direct Impact (ac)	On-Site Mitigation Creation (ac)	Off-Site Mitigation Preservation (ac)	Off-Site Mitigation Restoration/Creation (ac)
	FED2	Vernal Pool	0.0702	0.0000	0.1404	0.0702
	FED2	Wetland Swale	0.0574	0.0963	0.0000	0.0000
		FED2 Total	0.1325	0.0963	- 0.1502	0.0751
	FED3	Seasonal Wetland	0.0107	0.0000	0.0215	0.0107
	FED3	Wetland Swale	0.0120	201	0.0000	0.0000
		FED3 Total	0.0227	0.0201	0.0215	0.0107
	1	Federico Road Total	0.3785	0.4909	0.1716	0.0858
Intersection	INT2	Perennial Marsh	0.0048	0.0080	0.0000	0.0000
	INT2	Perennial Stream	0.1304	0.2188	0.0000	0.0000
	INT2	Seasonal Wetland	0.1235	0.0000	0.2469	0.1235
	INT2	Vernal Pool	0.0216	0.0000	0.0310	0.0216
	INT2	Wetland Swale	0.2387	0.4003	0.0000	0.0000
		INT2 Total	0.5190	0.6271	0.2779	0.1451
		Intersection Total	0.5190	0.6271	0.2779	0.1451
Market Street	MI	Intermittent Stream	0.0955	0.1603	0.0000	0.0000
	MI	Vernal Pool	0.0266	0.0000	0.0000	0.0266
	M1	Wetland Swale	0.0079	0.0132	0.0000	0.0000
		M1 Total	0.1299	0.1734	0.0000	0.0266
	M4	Wetland Swale	0.1060	0.1778	0.0000	0.0000
		M4 Total	0.1060	0.1778	0.0000	0.0000
	M5	Perennial Stream	0.1076	0.1805	0.0000	0.0000
	M5	Seasonal Wetland	0.0303	0.0509	0.0000	0.0000
	M5	Vernal Pool	0.0822	0.0000	0.0000	0.0822
	M5	Wetland Swale	0.0543	0.0911	0.0000	0.0000
		M5 Total	0.2744	0.3225	0.0000	0.0822
	- 1	Market Street Total	0.5103	0.6737	0.0000	0.1087
Quasi-Public Facilities	P1	Vernal Pool	0.0228	0.0000	0.0000	0.0228
Water Storage Facilit	y	Pl Total	0.0228	0.0000	0.0000	0.0228

EXHIBIT B
BACKBONE INFRASTRUCTURE IMPACTS AND CORRESPONDING MITIGATION

Infrastructure Type	Infrastructure Segment	Impacted Habitat Type	Direct Impact (ac)	On-Site Mitigation Creation (ac)	Off-Site Mitigation Preservation (ac)	Off-Site Mitigation Restoration/Creation (ac)
	P3	Vernal Pool	0.0344	0.0000	0.0000	0.0344
Recycling Facility		P3 Total	0.0344	0.0000	0.0000	0.0344
	P4	Wetland Swale	0.0455	0.0763	- 0.0000	0.0000
Fire Station		P4 Total	0.0455	0.073	0.0000	0.0000
	P5	Wetland Swale	0.0030	050	0.0000	0.0000
Lift Station		P5 Total	0.0030	0.0050	0.0000	0.0000
	Quasi-Put	olic Facilities Total	0.1056	0.0813	0.0000	0.0572



EXHIBIT B
BACKBONE INFRASTRUCTURE IMPACTS AND CORRESPONDING MITIGATION

Infrastructure Type	Infrastructure Segment	Impacted Habitat Type	Direct Impact (ac)	On-Site Mitigation Creation (ac)	Off-Site Mitigation Preservation (ac)	Off-Site Mitigation Restoration/Creation (ac)
Santucci Boulevard	S4	Intermittent Stream	0.1344	0.2254	0.0000	0.0000
	S4	Seasonal Wetland	0.1674	0.2643	0.0197	0.0098
	S4	Vernal Pool	0.4527	0.0000	0.8906	0.4527
	S4	Wetland Swale	0.0116	0.2 74	0.0000	0.0000
		S4 Total	0.7661	5992	0.9103	0.4625
	S5	Seasonal Wetland	0.0040	0.0000	0.0081	0.0040
	S5	Swale Depressional	0.0342	0.0000	0.0684	0.0342
	S5	Vernal Pool	0.0348	0.0000	0.2405	0.0348
	S5	Wetland Swale	0.0623	0.1045	0.0000	0.0000
	S5 Total		0.1354	0.1045	0.3169	0.0731
	S6	Seasonal Wetland	0.0238	0.0000	0.0475	0.0238
	S6	Vernal Pool	0.1559	0.0000	0.3117	0.1559
	S6	Wetland Swale	0.0142	0.0238	0.0000	0.0000
		S6 Total	0.1938	0.0238	0.3592	0.1796
	Santu	cci Boulevard Total	1.0952	0.6375	1.5864	0.7152
Sierra Glen Drive	SG1	Vernal Pool	0.0275	0.0000	0.0000	0.0275
		SG1 Total	0,0275	0.0000	0.0000	0.0275
	Sie	rra Glen Drive Total	0.0275	0.0000	0.0000	0.0275
Γrails	TI	Wetland Swale	0.0059	0.0100	0.0000	0.0000
		T1 Total	0.0059	0.0100	0.0000	0.0000
	T2	Intermittent Stream	0.0087	0.0146	0.0000	0.0000
		T2 Total	0.0087	0.0146	0.0000	0.0000
	T3	Intermittent Stream	0.0186	0.0312	0.0000	0.0000
		T3 Total	0.0186	0.0312	0.0000	0.0000
	T4	Perennial Stream	0.0123	0.0207	0.0000	0.0000
		T4 Total	0.0123	0.0207	0.0000	0.0000
		Trails Total	0.0456	0.0764	0.0000	0.0000

EXHIBIT B

BACKBONE INFRASTRUCTURE IMPACTS AND CORRESPONDING MITIGATION

Infrastructure Type	Infrastructure Segment	Impacted Habitat Type	Direct Impact (ac)	On-Site Mitigation Creation (ac)	Off-Site Mitigation Preservation (ac)	Off-Site Mitigation Restoration/Creation (ac)
Utility Lines	U1	Intermittent Stream	0.0379	0.0635	0.0000	0.0000
	UI	Vernal Pool	0.0470	0.0000	0.0000	0.0470
		Ul Total	0.0848	0.0635	. 0.0000	0.0470
	U10	Seasonal Wetland	0.0007	0.00212	0.0000	0.0000
		U10 Total	0.0007	0 012	0.0000	0.0000
	UII	Perennial Stream	0.0076	0.6.28	0.0000	0.0000
		U11 Total	0.0076	0.0128	0.0000	0.0000
	U12	Perennial Stream	0.0196	0.0329	0.0000	0.0000
	U12	Wetland Swale	0.0006	0.0010	0.0000	0.0000
		U12 Total	0.0202	0.0339	0.0000	0.0000
	U14	Perennial Stream	0.0231	0.0387	0.0000	0.0000
		U14 Total	0.0231	0.0387	0.0000	0.0000
	U15	Seasonal Wetland	0.0222	0.0372	0.0000	0.0000
	U15	Wetland Swale	0.0008	0.0013	0.0000	0.0000
		U15 Total	0.0230	0.0385	0.0000	0.0000
	U16	Seasonal Wetland	0.0588	0.0987	0.0000	0.0000
		U16 Total	0.0588	0.0987	0.0000	0.0000
	U2	Vernal Pool	0.0092	0.0000	0.0000	0.0092
	U2	Wetland Swale	0.0116	0.0195	0.0000	0.0000
		U2 Total	0.0209	0.0195	0.0000	0.0092
	U4	Intermittent Stream	0.0000	0.0000	0.0000	0.0000
	U4	Seasonal Wetland	0.0099	0.0166	0.0000	0.0000
		U4 Total	0.0099	0.0166	0.0000	0.0000
	U5	Seasonal Wetland	0.0200	0.0336	0.0000	0.0000
		U5 Total	0.0200	0.0336	0.0000	0.0000
	U6	Vernal Pool	0.0778	0.0000	0.1555	0.0778
		U6 Total	0.0778	0.0000	0.1555	0.0778
	U7	Intermittent Stream	0.0945	0.1586	0.0000	0.0000
	U7	Vernal Pool	0.1145	0.0000	0.0000	0.1145

EXHIBIT B

BACKBONE INFRASTRUCTURE IMPACTS AND CORRESPONDING MITIGATION

Infrastructure Type	Infrastructure Segment	Impacted Habitat Type	Direct Impact (ac)	On-Site Mitigation Creation (ac)	Off-Site Mitigation Preservation (ac)	Off-Site Mitigation Restoration/Creation (ac)
		U7 Total	0.2090	0.1586	0.0000	0.1145
	U8	Intermittent Stream	0.0020	0.0033	0.0000	0.0000
	U8	Vernal Pool	0.0693	0.0000	- 0.0000	0.0693
		U8 Total	0.0713	0.0003	0.0000	0.0693
	U9	Wetland Swale	0.0165	277	0.0000	0.0000
		U9 Total	0.0165	0.0277	0.0000	0.0000
		Utility Lines Total	0.6437	0.5467	0.1555	0.3178

EXHIBIT B

BACKBONE INFRASTRUCTURE IMPACTS AND CORRESPONDING MITIGATION

Infrastructure Type	Infrastructure Segment	Impacted Habitat Type	Direct Impact (ac)	On-Site Mitigation Creation (ac)	Off-Site Mitigation Preservation (ac)	Off-Site Mitigation Restoration/Creation (ac)
Upland Drive	UP3	Perennial Stream	0.0172	0.0289	0.0000	0.0000
	UP3	Seasonal Wetland	0.1014	0.1700	0.0000	0.0000
	UP3	Wetland Swale	0.0110	0.0184	0.0000	0.0000
		UP3 Total	0.1295	0.2173	0.0000	0.0000
	UP4	Perennial Stream	0.1171	965	0.0000	0.0000
	UP4	Seasonal Wetland	0.3514	0.5894	0.0000	0.0000
		UP4 Total	0.4685	0.7859	0.0000	0.0000
	UP5	Wetland Swale	0.0716	0.1201	0.0000	0.0000
		UP5 Total	0.0716	0.1201	0.0000	0.0000
		Upland Drive Total	0.6696	1.1233	0.0000	0.0000
ista Grande Boulevard	VI	Wetland Swale	0.1568	0.2630	0.0000	0.0000
		V1 Total	0.1568	0.2630	0.0000	0.0000
	V2	Seasonal Wetland	0.0268	0.0450	0.0000	0.0000
		V2 Total	0.0268	0.0450	0.0000	0.0000
	V3	Seasonal Wetland	0.0478	0.0802	0.0000	0.0000
		V3 Total	0.0478	0.0802	0.0000	0.0000
	V4	Vernal Pool	0.0668	0.0000	0.0000	0.0668
	V4	Wetland Swale	0.0012	0.0021	0.0000	0.0000
		V4 Total	0.0681	0.0021	0.0000	0.0668
	V5	Seasonal Wetland	0.0021	0.0000	0.0043	0.0021
	V5	Vernal Pool	0.4441	0.0000	0.8881	0.4441
	V5	Wetland Swale	0.0030	0.0051	0.0000	0.0000
		V5 Total	0.4492	0.0051	0.8924	0.4462
	V6	Seasonal Wetland	0.0659	0.1106	0.0000	0.0000
	V6	Wetland Swale	0.0054	0.0091	0.0000	0.0000
		V6 Total	0.0714	0.1197	0.0000	0.0000
	V7	Seasonal Wetland	0.0798	0.1338	0.0000	0.0000
	V7	Vernal Pool	0.2422	0.0000	0.0000	0.2422

EXHIBIT **B**BACKBONE INFRASTRUCTURE IMPACTS AND CORRESPONDING MITIGATION

Infrastructure Type	Infrastructure Segment	Impacted Habitat Type	Direct Impact (ac)	On-Site Mitigation Creation (ac)	Off-Site Mitigation Preservation (ac)	Off-Site Mitigation Restoration/Creation (ac)
	V7	Wetland Swale	0.0163	0.0273	0.0000	0.0000
		V7 Total	0.3383	0.1611	0.0000	0.2422
	V8	Ephemeral Stream	0.3205	0.5376	0.0000	0.0000
	V8	Perennial Stream	0.1587	0.233	0.0000	0.0000
	V8	Seasonal Wetland	0.0154	0259	0.0000	0.0000
	V8	Vernal Pool	0.0494	0.0000	0.0000	0.0494
	V8	Wetland Swale	0.3641	0.6108	0.0000	0.0000
		V8 Total	0.9081	1.4405	0.0000	0.0494
	Vista Grande Boulevard Total		2.0664	2.1166	0.8924	0.8047
Vestbrook Boulevard	W2	Vernal Pool	0.0232	0.0000	0.0465	0.0232
	W2	Wetland Swale	0.0133	0.0223	0.0000	0.0000
	W2 Total		0.0365	0.0223	0.0465	0.0232
	W4	Intermittent Stream	0.1253	0.2102	0.0000	0.0000
	W4	Vernal Pool	0.0770	0.0000	0.0000	0.0770
		W4 Total	0.2023	0.2102	0.0000	0.0770
	W6	Seasonal Wetland	0.0600	0.0000	0.2189	0.0600
	W6	Swale Depressional	0.0000	0.0000	0.0110	0.0000
	W6	Vernal Pool	0.1528	0.0000	0.3790	0.1528
	W6	Wetland Swale	0.1449	0.2430	0.0000	0.0000
	W6 Total		0.3577	0.2430	0.6088	0.2128
	Westbro	ok Boulevard Total	0.5965	0.4755	0.6553	0.3130
	INFRASTRUC	CTURE TOTAL	7.9924	7.9626	9.0565	3.2457



GENERAL CONFORMITY ANALYSIS

Under Section 176(c)(1) of the federal Clean Air Act (CAA), federal agencies that "engage in, support in any way or provide financial assistance for, license or permit, or approve any activity" must demonstrate that such actions do not interfere with state and local plans to bring an area into attainment with the National Ambient Air Quality Standards (42 USC § 7506(c)).

The Proposed Action is located in the Sacramento Valley Air Basin (SVAB), an 11-county air basin that is designated as nonattainment with respect to the national standards for 8-hour ozone and fine particulate matter (PM2.5). To address the SVAB's nonattainment status, the regional air districts, including the Placer County Air Pollution Control District (PCAPCD), have worked together to produce implementation plans for attainment of the national standards. The General Conformity Rule ensures a federal agency's actions in a non-attainment area do not obstruct or conflict with a state or local implementation plan. The implementing regulations for the General Conformity Rule are found in Title 40 CFR, Part 51, Subpart W and Part 93, Subpart B. In addition, the PCAPCD has adopted the federal General Conformity regulations under Regulation 5, Rule 508.

Under the General Conformity regulations, both the direct and indirect emissions associated with a federal action must be evaluated. Subpart W defines direct emissions as:

[T]hose emissions of a criteria pollutant or its precursors that are caused or initiated by the Federal action and occur at the same time and place as the action (40 CFR § 51.852).

Indirect emissions are defined as:

[T]hose emissions of a criteria pollutant or its precursors that:

- (1) Are caused by the Federal action, but may occur later in time and/or may be farther removed in distance from the action itself but are still reasonably foreseeable; and
- (2) The Federal agency can practicably control and will maintain control over due to a continuing program responsibility of the Federal agency (40 CFR § 51.852).

A conformity determination is required for each criteria pollutant or precursor where the total of direct and indirect emissions of the criteria pollutant or precursor in a federal nonattainment or maintenance area would equal or exceed specified annual emission rates, referred to as *de minimis* thresholds. For ozone precursors, the *de minimis* thresholds depend on the severity of the nonattainment classification; for other pollutants, the threshold is set at 100 tons per year. The Air Basin was designated as serious nonattainment for ozone by the US EPA in June 2004. However, due to concerns with meeting emissions reductions targets, the member air districts of the Sacramento Federal Nonattainment Area requested a

voluntary reclassification to severe, which was approved by the US EPA in June 2010. The relevant *de minimis* thresholds for the Air Basin are shown below in **Table 1**.

Table 1
General Conformity De Minimis Thresholds

Pollutant	Attainment Status	Annual Emissions (tons/year)
NOx	Nonattainment/Severe (Ozone)	25
VOC	Nonattainment/Severe (Ozone)	25
PM2.5 (direct)	Nonattainment	100
PM2.5 (NOx) ¹	Nonattainment	100
PM2.5 (VOC and NH ₃) ²	Nonattainment	100
PM2.5 (SOx)	Nonattainment	100

Notes:

According to the General Conformity Rule, conformity analysis only applies to activities that trigger National Environmental Policy Act (NEPA) review. Where the federal action is a permit, license, or other approval for some aspect of a nonfederal undertaking, the relevant activity is the part, portion, or phase of the nonfederal undertaking that requires the federal permit, license, or approval. The U.S. Army Corps of Engineers (USACE) permit action is limited to filling of the waters of the U.S. on the project site and in the area of off-site improvements and does not extend to other construction activities, nor will the USACE maintain control over those elements of the Proposed Action or alternatives that are associated with operation of facilities constructed under the Sierra Vista Specific Plan Project. Accordingly, this

¹ NOx (oxides of nitrogen) is included for PM2.5 unless determined not to be a significant precursor. However, the NOx threshold based on its contribution to ozone is more stringent.

² VOC (volatile organic compounds) and NH₃ (ammonia) are not included for PM2.5 unless determined to be a significant precursor. However, the VOC threshold based on their contribution to ozone is more stringent. Only very minor emissions of ammonia would be emitted to the atmosphere as a result of the Proposed Action or its alternatives.

As stated in 40 CFR Parts 6, 51, and 93 (FRL-4805-1), Determining Conformity of General Federal Actions to State or Federal Implementation Plans, "the definition of "Federal action" is revised by adding the following sentence to the end of the definition in the proposal: Where the Federal action is a permit, license, or other approval for some aspect of a nonfederal undertaking, the relevant activity is the part, portion, or phase of the nonfederal undertaking that requires the Federal permit, license, or approval. The following examples illustrate the meaning of the revised definition. Assume, for example, that the COE issues a permit and that permitted fill activity represents one phase of a larger nonfederal undertaking; i.e., the construction of an office building by a nonfederal entity. Under the conformity rule, the COE would be responsible for addressing all emissions from that one phase of the overall office development undertaking that the COE permits; i.e., the fill activity at the wetland site. However, the COE is not responsible for evaluating all emissions from later phases of the overall office development (the construction, operation, and use of the office building itself), because later phases generally are not within the COE's continuing program responsibility and generally cannot be practicably controlled by the COE."

evaluation will not consider the operational emissions from the development of the Proposed Action (or alternatives). Furthermore, with respect to construction emissions, the scope of the conformity analysis would be appropriately limited to the emissions associated with grading activities that would result in the filling of jurisdictional wetlands, any associated access roads, and any staging areas necessary to conduct the filling activity. Other construction activities not associated with the filling of jurisdictional waters would not be included in the conformity calculations.

While grading would take place over a large area of the project site, only a small portion of the grading would involve the filling of jurisdictional waters, and only this small portion of the grading is required to be analyzed. However, since information was readily available for the effect of grading the site as a whole, the USACE analyzed this data. If this data had provided emissions greater than the threshold then further efforts to focus the analysis on the grading specific to the discharge of dredge or fill into waters of the U.S. would have been warranted. In this case, the effects of the entire grading operations do not exceed the *de minimis* thresholds. For this reason, the entire grading operations were analyzed even though the grading operations that are required to be analyzed are a small portion of the overall operation. Annual grading emissions for the Proposed Action were estimated using URBEMIS2007. Emissions totals for the alternatives are essentially the same as those for the Proposed Action or smaller, so if the Proposed Action is determined to meet the conformity criteria, then the alternatives would as well.

Table 2. As the table shows, all emission values are less than the *de minimis* threshold for that pollutant. Based on this preliminary analysis, a *detailed* conformity analysis by the USACE is not required (40 CFR § 51.858). In addition, the direct emissions associated with the Proposed Action would not conflict with or obstruct implementation of the applicable air quality plan (*i.e.*, SIP for the Sacramento Valley Air Basin).

Table 2
Direct Average Annual Construction Emissions

Source	VOC (tons/year)	NOx (tons/year)	SOx (tons/year)	PM2.5 (tons/year)
Proposed Action	0.67	4.56	0.00	16.94
Thresholds (tons/year)	25	25	100	100
Exceeds Threshold?	NO	NO	NO	NO

Source: Impact Sciences, Inc. Emissions calculations are attached.

Regardless of whether the USACE focuses only on direct emissions associated with the issuance of a Section 404 permit for the Proposed Action or whether it looks more broadly at all emissions associated with full buildout of the Sierra Vista project site, future air quality conditions are anticipated to improve over time within the affected air basin and buildout of the Sierra Vista Specific Plan Project would not result in a lack of conformity with approved federal air quality plans or the State Implementation Plan (SIP). In April 2012, the Sacramento Area Council of Governments (SACOG) reached a favorable conformity determination in approving in its most recent Regional Transportation Plan (called the MTP/SCS). SACOG's Draft EIR for the MTP/SCS explained SACOG's reasoning as follows:

In general, projecting the future air quality environment and how well the proposed MTP/SCS fits within existing air quality attainment plans, and their projected maintenance or attainment strategies, is evaluated through existing federal, state, and local air district processes. A determination of conformity, or conformance with the plans, is realized when: the forecasted emissions are within budgets identified in the plans or pass the interim emissions test; the latest planning assumptions and emission models are used; the plan and program are financially constrained; and the timely implementation of transportation control measures can be demonstrated. Conformity analyzes the impacts of land use and transportation in combination at the regional level. It quantitatively measures how selected land use and transportation planning principles in combination will affect our future air quality environment. As established in the proposed MTP/SCS, behavioral changes in choice of travel directly impacts mobile source emission generation projections; reduced [vehicle miles traveled] and trip numbers result in lower emissions.

The forecasted emissions for ozone, PM10 and CO associated with the proposed MTP/SCS are within in the conformity budgets identified within the existing plans for each milestone year. Similarly, the forecasted emissions for PM10 and PM2.5 associated with the proposed MTP/SCS pass all interim emissions tests for all milestone years.

The SCS, formulated pursuant to Senate Bill 375, assumed development of the Sierra Vista Specific Plan Project. Since buildout of all land uses assumed in the SCS would not conflict with or obstruct implementation of applicable federal air quality plans or the SIP, the same must necessarily be true of buildout of Sierra Vista Specific Plan Project by itself.

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Urbemis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/Year)

File Name:

Project Name: Sierra Vista Conformity Grading

Project Location: Placer County APCD

On-Road Vehicle Emissions Based on: Version: Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	ROG	<u>NOx</u>	CO	<u>SO2</u>	PM10 Dust PM	10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	<u>PM2.5</u>
2007 TOTALS (tons/year unmitigated)	0.01	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2007 TOTALS (tons/year mitigated)	0.01	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008 TOTALS (tons/year unmitigated)	31.10	22.25	33.34	0.05	0.20	0.94	1.14	0.07	0.86	0.93
2008 TOTALS (tons/year mitigated)	31.10	22.25	33.34	0.05	0.20	0.94	1.14	0.07	0.86	0.93
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2020 TOTALS (tons/year unmitigated)	0.67	4.56	3.72	0.00	80.26	0.19	80.45	16.76	0.17	16.94
2020 TOTALS (tons/year mitigated)	0.67	4.56	3.72	0.00	41.58	0.19	41.77	8.68	0.17	8.86
Percent Reduction	0.00	0.00	0.00	0.00	48.19	0.00	48.08	48.19	0.00	47.69



INDIRECT EFFECTS FROM THE CONSTRUCTION OF WATER SUPPLY PIPELINE TO SERVE ALTERNATIVE 4

The Draft EIS stated that potable water to serve Alternative 4 would be provided by the Placer County Water Agency (PWCA). Water that would be used at the Alternative 4 site would be treated by the Foothill/Sunset system, which consists of the Foothill Water Treatment Plant (WTP) in Newcastle and the Sunset WTP in Rocklin. According to the Placer County Water Agency (PCWA), the unused treatment capacity within the Foothill/Sunset water system would be provided on a first come-first served basis. But the agency also noted that the buildout demands for the service area of the Foothill/Sunset system exceeded the capacity of the Foothill and Sunset water treatment plants and expansion of additional treatment capacity within Foothill/Sunset system would be necessary. The Draft EIS also noted that the treated water would be delivered through PCWA's existing transmission pipeline system to the vicinity of Industrial Avenue. There the water would be introduced into the City of Roseville's potable water system and conveyed to the intersection of Baseline and Fiddyment roads. The pipeline to serve Alternative 4 would connect to the City's distribution system at this location and extend along Baseline Road to the Alternative 4 site. Ground disturbing activities associated with pipeline installation would result in footprint impacts including impacts to biological resources and cultural resources which would be significant, but would be mitigated to less than significant with the proposed mitigation.

Based on further consultation with the PCWA staff, the U.S. Army Corps of Engineers (USACE) has determined that the current combined capacity of the Foothill/Sunset water treatment system is 66 Million Gallons per Day (mgd) with the Foothill plant providing 58 mgd of capacity and the Sunset plant providing 8 mgd of capacity. As discussed in Draft EIS Section 3.15, Utilities, the historic peak day demand on this system is 55 mgd, resulting in 11 mgd of unused capacity at the present time. According to PCWA, about half of this unused capacity is committed to future development in western Placer County, leaving about 5.5 mgd available for any new projects, including Alternative 4, on a first comefirst serve basis. Based on a rate of 1,150 gallons per dwelling unit per day, this excess capacity could serve approximately 4,780 additional dwelling units. Given that Alternative 4 would provide 5,595 units, not enough unassigned capacity is available in the Foothill/Sunset system to serve Alternative 4, and the supply would need to be augmented with treated water from a new treatment source.

To meet future demand in western Placer County, the PCWA is planning to construct a new water treatment facility referred to as the Ophir Water Treatment Plant. This plant would add an additional 30 mgd to the system, and would serve the Alternative 4 site. PCWA has completed the environmental review for the construction and operation of the Ophir plant. With respect to conveying the treated water from this new plant to southwestern Placer County, a series of pipelines have been identified in conjunction with other proposed projects in the area, including the Placer Vineyards Specific Plan project

and have been evaluated for their environmental impacts in the Second Partial Draft EIR for Placer Vineyards Specific Plan prepared by Placer County (Placer County 2007).

The pipeline route identified in the Placer Vineyards Specific Plan EIR would extend from the Ophir plant through the City of Rocklin and north of the City of Roseville where it would then turn south down Watt Avenue along the western boundary of Roseville to Baseline Road. This pipeline alignment, shown on **Figure 1**, would also serve the Alternative 4 site. As noted in the Placer Vineyards Specific Plan EIR, the pipeline project would be proposed by the PCWA and constructed upon completion of appropriate environmental review by that agency.

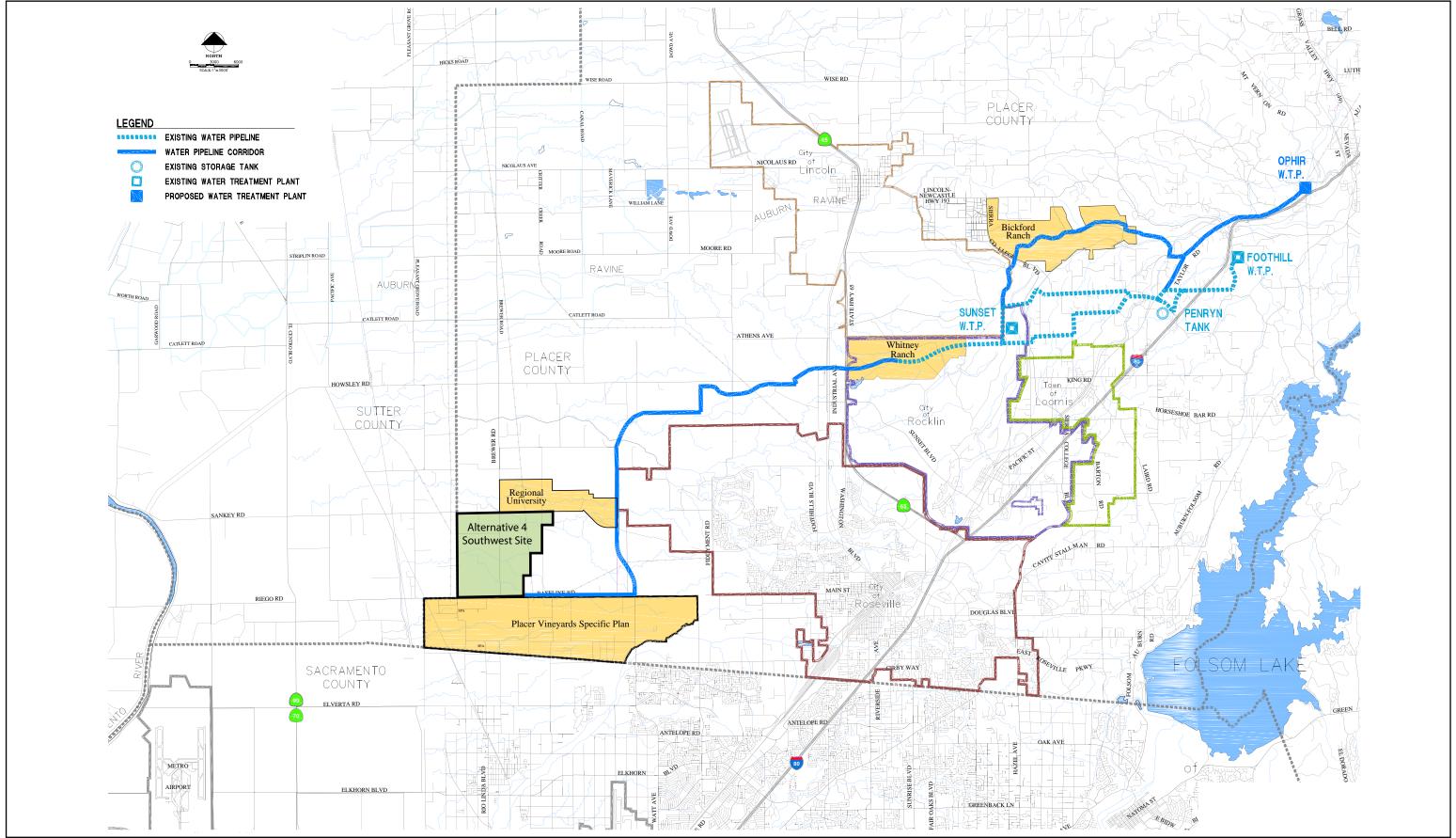
As it would not be constructed by the Sierra Vista Specific Plan Applicants, the pipeline is not a part of Alternative 4. However, because it is required in order to develop Alternative 4, the environmental effects from the construction of this water supply improvement are analyzed and reported below as potential indirect effects of Alternative 4.

Indirect Effects on Aesthetics

Council on Environmental Quality (CEQ) guidance requires an evaluation of a proposed action's effect on the human environment. USACE has determined that the pipeline project would result in significant effects related to aesthetics if it would have a substantial adverse effect on a scenic resource or substantially degrade the visual character of the site and its surroundings.

The construction and operation of off-site water pipeline infrastructure by the PCWA would result in **significant** effects to aesthetics. The corridors where the pipeline would be constructed are primarily along existing roadways and utility corridors. The infrastructure would mostly be underground and not visible, except at utility line access points. Once constructed, the corridor would be revegetated as necessary. The temporary disturbance of pipeline corridor in addition to aboveground permanent water pipeline structures would degrade the visual character in the area. The effects from permanent above ground pipeline infrastructure would be significant.

Although mitigation measures are available to reduce these effects to less than significant, USACE does not have the authority to impose mitigation measures on a project that would be built by the PCWA, and there is no guarantee that the mitigation measures would be implemented by the PCWA. Therefore, the USACE finds that the effects would remain **significant**.



SOURCE: County of Placer, 2007/ Impact Sciences, 2013

FIGURE 1

Water Supply Pipeline

Indirect Effects on Agricultural Resources

The USACE has determined that the pipeline project would result in significant effects related to agricultural resources if it would result in the conversion of Important Farmland or land in active intensive agricultural production to non-agricultural uses; or place incompatible uses adjacent to existing agricultural uses. Important Farmland is defined as land that is designated as prime farmland, unique farmland, and land of statewide or local importance under the Farmland Mapping and Monitoring Program (FMMP).

The construction of off-site water pipeline infrastructure by the PCWA would result in **less than significant** effects on agricultural resources. The corridors where the water infrastructure would be constructed are primarily along existing roadways and utility corridors and would not affect Important Farmland. However, in some locations construction in the utility line corridor would result in temporary loss of use of agricultural land. Because the loss of use would be temporary and agricultural operations would be resumed once pipeline construction is completed, the effect would be **less than significant**. Operation of the pipelines would not result in disruption of agricultural land. Therefore, operational impacts would be **less than significant**. Mitigation is not required.

Indirect Effects on Air Quality

The Air District has adopted thresholds for determining significant impacts on air quality. In accordance with guidance from the Council on Environmental Quality (40 CFR 1506.2), the USACE considers local standards when determining significance of the impacts of a proposed action. Therefore, the USACE has used the thresholds developed by the local Air District to evaluate the impacts of the pipeline construction on air quality. The Air District thresholds presented below in **Table 1**, **Placer County CEQA Significance Thresholds**, are for both construction and operation.

Table 1
Placer County Air District Significance Thresholds

- 4	Threshold
Pollutant	(lbs per day)
ROG	82
NOx	82
PM10	82
СО	550

ROG = reactive organic gases; NOx = oxides of nitrogen; PM10 = respirable particulate matter; CO = carbon monoxide.

Source: Placer County APCD, (2010).

The construction activities associated with the off-site water pipeline infrastructure by the PCWA would result in **significant** effects to air quality. There would be no operational air quality emissions.

Construction of the pipeline would generate exhaust emissions, primarily NOx, from equipment. In addition, there would be fugitive dust emissions due to excavation, grading, and exposed earth. The duration and extent of the construction is unknown. Therefore, average daily construction emissions cannot be estimated. Nonetheless, given the nonattainment status of the Air Basin with respect to ozone and particulate matter, the USACE conservatively assumes that the emissions would result in a **significant** impact. While standard construction-phase mitigation measures would reduce the emissions, the emissions have not been estimated, so it cannot be concluded that the emissions would be reduced to below thresholds. Therefore, the impact would not be fully mitigated and a **residual impact** would result. Furthermore, the USACE does not have the authority to impose mitigation measures on a project that would be built by the PCWA and finds that the effect would remain **significant**.

Indirect Effects on Biological Resources

The Council on Environmental Quality (CEQ) regulations requires an evaluation of a proposed action's ecological effects such as the effects on natural resources and on the components, structures and functioning of affected ecosystems (40 CFR 1508.8), as well as effects in Endangered or Threatened species or their habitat (40 CFR 1508.27). The National Environmental Policy Act (NEPA) does not specify significance thresholds to evaluate the effects of a proposed action on biological resources. For purposes of evaluating the effects in this EIS, the USACE has determined that the pipeline project would result in significant effects on biological resources if it would have a substantial adverse effect, either directly or

through habitat modification, on any species identified as a candidate, sensitive, Threatened, Endangered, or special-status species, in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or the U.S. Fish and Wildlife Service (USFWS), or on riparian habitat, or on waters of the United States, or interfere with the movement of any native, resident, or migratory wildlife species.

The construction and operation of off-site water pipeline infrastructure by the PCWA which would be used by Alternative 4 was evaluated in the Second Partial Draft EIR for Placer Vineyards Specific Plan (PVSP) (Placer County 2007) prepared by Placer County. The analysis in the EIR concluded that construction activities associated with the water pipeline infrastructure would have the potential to impact wetlands (including vernal pools) and other jurisdictional aquatic features, riparian habitat, nesting habitat for raptors and other migratory birds, and elderberry shrubs providing habitat for the Valley elderberry longhorn beetle. The off-site water pipeline could cross several streams and listed fish species could occur in those streams. The effect on biological resources was determined to be potentially significant. The EIR noted that mitigation measures included in the Placer Vineyards Specific Plan EIR to address off-site infrastructure impacts could reduce the impacts of the water pipeline infrastructure, but that all impacts may not be reduced to a less than significant level.

At this time, the pipeline project has not been put forth by PCWA. However, because the pipeline project will most likely involve filling of the waters of the US, PCWA will require a permit from the USACE. As part of the permit process, the USACE will require that all project impacts on jurisdictional waters and other biological resources be mitigated to a less than significant level. The USACE finds that because of the USACE's no net loss policy, with compliance with permit conditions, impacts to waters of the U.S. would be reduced to a less than significant level. The USACE finds that other impacts including impacts to raptors, migratory birds, the Valley elderberry longhorn beetle, and listed fish species, would also be reduced to less than significant as the project would be required to comply with the federal and state Endangered species acts and implement the conditions of the biological opinion.

Indirect Effects on Climate Change

NEPA does not specify significance thresholds that may be used to evaluate the effects of a proposed action on global climate. As the appropriate approach to evaluating a project's impact on global climate under NEPA is still under development, consistent with CEQ guidance, the USACE examined State of California and local guidance and protocols related to the effects of greenhouse gas (GHG) emissions to

select a threshold of significance to use to evaluate the effect. No thresholds are available at the state or local level to evaluate the impacts on climate from the construction of the water pipeline.

The construction and operation of off-site water pipeline infrastructure by the PCWA would result in **less than significant** effects to climate change. The duration and extent of construction is unknown. However because construction emissions of GHG would be short term and very small compared to the operational GHG emissions of any development project or the construction emissions of Alternative 4, and mitigation measures that are routinely implemented to reduce criteria pollutant emissions from construction equipment would also reduce GHG emissions, the impact from construction-phase GHG emissions associated with pipeline infrastructure would be less than significant. There would be no operational GHG emissions related to maintenance of the off-site water pipeline.

Indirect Effects on Cultural Resources

Under the National Historic Preservation Act (NHPA), the federal Lead Agency is required to take into account the effects of its undertakings on historic properties. If historic properties are present within the project Area of Potential Effects, the Lead Agency must determine whether its actions would adversely affect the significance of the historic property.

Under federal regulations, a project has an effect on an historic property when the undertaking could alter the characteristics of the property that may qualify the property for inclusion in the National Register of Historic Places (NRHP). An undertaking may be considered to have an adverse effect on an historic property when it may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects on historic properties include, but are not limited to, physical destruction, alteration, or removal of all or part of the property or change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance.

The construction and operation of off-site water pipeline infrastructure by the PCWA would have a **less than significant** impact on Native American archaeological resources and **unknown effects** on historic sites.

The record search indicates that there is one Native American site identified on the basis of an archaeological isolate discovered along the pipeline reaches. The discovery of a single artifact does not indicate that the site is highly sensitive. However, it is possible that Native American archaeological features or deposits may be buried along the water pipeline route particularly near waterways. If a

NRHP-eligible buried archaeological deposit or feature, or human remains—either in an archaeological context or in isolation—were discovered during construction, disturbance or destruction of the deposit or the remains would constitute a **significant** effect to an historic property. Therefore, **Mitigation Measure CR-1** would apply to any archaeological sites that are encountered during construction and would reduce this effect to **less than significant**.

With respect to features of the built environment that could potentially be historic, the significance of each feature located along or near the proposed pipeline route would need to be individually assessed. Certain sites, specifically linear sites such as canals, railroads, roads, and fences, do not display integrity along the entire length. Therefore, each individual feature would need to be evaluated to determine eligibility of the specific segment for the NRHP. The effect to historic sites along or near the proposed water pipeline route cannot be determined at this time. In the event that a Section 404 permit is sought by PCWA for the pipeline project, a detailed evaluation of all features would be completed in order to comply with Section 106. If some features are determined to be historic resources, appropriate mitigation measures would be developed and implemented.

The USACE notes that at this time, the PCWA has not submitted an application to the USACE for a Section 404 permit for the pipeline infrastructure project, and therefore at the present time, USACE does not have a mechanism to any mitigation measures on the infrastructure project.

Indirect Effects on Environmental Justice, Population, and Housing

NEPA does not specify significance thresholds that may be used to evaluate the effects of a proposed action related to environmental justice. However, CEQ guidance requires an evaluation of a proposed action's effect on the human environment, and the USACE must comply with Executive Order 12898. The USACE has determined that the pipeline project would result in significant effects related to environmental justice if it would disproportionately adversely affect an environmental justice (EJ) community through its effects on environmental conditions such as quality of air, water, and other environmental media; degradation of aesthetics, loss of open space, and nuisance concerns such as odor, noise, and dust, public welfare in terms of social conditions such as reduced access to certain amenities like hospitals, safe drinking water, public transportation, etc. or public welfare in terms of economic conditions such as changes in employment, income, and the cost of housing, etc.

The construction and operation of off-site water pipeline infrastructure by the PCWA would result in **less than significant** effect on environmental justice, population, and housing.

The construction of the infrastructure may induce population growth in the area. However, the water pipeline would be built to provide for anticipated population growth that would remain within Sacramento Area Council of Governments (SACOG) growth projections. The proposed pipeline would not displace any population or housing. The construction activities would also not disproportionately affect minority or low-income populations. Therefore, the effect on environmental justice, population, and housing from the water pipeline infrastructure would be **less than significant**. Mitigation is not necessary.

Indirect Effects Associated with Geology, Soils, and Minerals

The USACE has determined that the pipeline project would result in significant effects related to geology and soils if it would preclude the development of or access to mineral deposits, expose structures to strong seismic ground shaking, seismically induced ground failure, including liquefaction, landslides, other slope failure, or result in substantial soil erosion or the loss of topsoil.

The construction and operation of off-site water pipeline infrastructure by the PCWA would result in **significant** effects associated with geology, soils, and minerals. The area around the pipeline route is not known for mineral deposits. In addition, the route would be constructed along existing roadways and utility easements, which under existing conditions would limit access to potential mineral deposits. Therefore, construction and operation would not prevent access to potential mineral deposits.

The pipeline route is located in an area of low seismic activity, limiting risk from seismic groundshaking, or liquefaction. The pipeline would be constructed on primarily flat terrain, reducing the possibility of slope failure. There may be expansive soils along the pipeline route. The County requires compliance with the California Building Code which would reduce risk associated with seismic hazards and expansive soils. As analyzed in the PVSP Second Partially Recirculated Revised Draft EIR dated March 2007, there are no areas of suspected or potential ground instability. However, erosion is expected to occur in disturbed soil areas. Soil stockpiles are also susceptible to erosion and soil loss. These impacts would be significant.

Mitigation measures are available to reduce the effects related to erosion to a less than significant level. However, the USACE does not have the authority to impose mitigation measures on a project that would be built by the PCWA and finds that the effects would remain **significant**.

Indirect Effects Associated with Hazards and Hazardous Materials

NEPA does not specify significance thresholds that may be used to evaluate the effects of a proposed action on hazards and hazardous materials. However, CEQ regulations require an evaluation of the degree to which the proposed action could affect public health or safety. The USACE has determined that the pipeline project would result in significant effects related to hazards and hazardous materials if it would result in exposure of construction workers or the public to contaminated soil or groundwater or expose people to a public safety hazard.

The construction and operation of off-site water pipeline infrastructure by the PCWA would result in significant effects associated with hazards and hazardous materials. The pipeline would convey potable water to the project site and other nearby areas which even if damaged, would not represent a hazard to residents near the pipeline route. As analyzed in the PVSP Second Partially Recirculated Revised Draft EIR dated March 2007, construction of the water pipeline may subject construction workers to hazardous materials such as petroleum products, underground storage tanks (USTs), contaminated soils, refuse, abandoned wells, septic systems, and structures containing asbestos. Although construction activities would be subject to federal and state hazardous materials regulations and worker safety regulations regarding handling of and exposure to hazardous materials, and the infrastructure project would be required to comply with National Pollutant Discharge Elimination System (NPDES) requirements, including submission of a Storm Water Pollution Prevention Plan (SWPP), nonetheless significant impacts could occur. Although mitigation measures are available to reduce the effects associated with hazards and hazardous materials from off-site infrastructure to a less than significant level, the USACE does not have the authority to impose mitigation measures on a project that would be built by the PCWA and finds that the effects would remain significant.

Indirect Effects related to Hydrology and Water Quality

CEQ guidance requires an evaluation of a proposed action's effect on the human environment. The USACE has determined that the pipeline project would result in significant effects related to hydrology and water quality if it would

- substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site;
- place structures within a 100-year floodplain or place structures that would impede or redirect flood flows; or

 during and post construction, create substantial additional sources of polluted runoff that could affect water quality.

The construction and operation of off-site water pipeline infrastructure by the PCWA would result in significant effects to hydrology and water quality. As analyzed in the PVSP Second Partially Recirculated Revised Draft EIR dated March 2007, the pipeline route would be constructed along existing roadways and utility easements. The pipeline would primarily be underground. Construction would generally replace the existing surface material with similar or in-kind surface materials. Therefore, construction of the pipeline would not result in a substantial increase in impervious surfaces or runoff. As discussed in the EIR, the proposed pipeline route would cross waterways and 100-year floodplains. However, the pipeline would be buried and enclosed and would not cause any impacts to the waterways or floodplains.

As discussed in the EIR, grading operations would result in loss of vegetation and expose soils to erosion. Construction equipment and vehicles could release contaminants. Storm water could transport eroded soil and contaminants into nearby waterways contributing to higher sediment loads. The increased sediment loads and turbidity in local waterways would be considered a significant short-term water quality impact. Mitigation measures are identified in the Placer Vineyards EIR to reduce the effects associated with erosion to a less than significant level. These mitigation measures require a General Construction Activity Stormwater Permit under the NPDES from the State Water Resources Control Board (SWRCB). As the project would be required by federal and state law to comply with NPDES requirements, the impact related to soil erosion and polluted runoff during construction would be reduced to a less than significant level.

Indirect Effects related to Land Use and Planning

The USACE has determined that the pipeline project would result in significant effects related to land use and planning if it would result in the development of incompatible land uses, physically divide an established community, or conflict with applicable plans, policies, or regulations.

The construction and operation of off-site water pipeline infrastructure by the PCWA would result in **less than significant** effect on land use and planning.

The water pipeline would not conflict with neighboring agricultural, rural and urban land uses as construction of the improvements would be temporary and would mostly occur within existing rights of way. Use of agricultural land may be temporarily disturbed during construction. The majority of the

proposed infrastructure would be underground and would not disturb any adjacent land uses during or divide existing communities.

Placer County General Plan Policy 4.A.2 requires that the County ensure through the development review process that adequate public facilities and services are available to serve new development. The pipeline would be constructed to supply water to projects in the area, including Alternative 4, as required by the General Plan. There would be no conflict with General Plan policies. Therefore, the effect on land use and planning from the water pipeline infrastructure project would be **less than significant**. Mitigation is not necessary.

Indirect Effects on Noise

CEQ guidance requires an evaluation of a proposed action's effect on the human environment. The USACE has determined that the pipeline project would result in significant effects related to noise if its construction would expose persons to noise levels in excess of standards established in the City of Roseville Municipal Code Noise Ordinance or the noise standards established in the Placer County Noise Ordinance and the Noise Element of the Placer County General Plan or expose persons to excessive ground-borne vibration or ground-borne noise levels.

The construction of off-site water pipeline infrastructure by the PCWA would result in **less than significant** effects related to noise. The water infrastructure would be primarily underground pipelines that would not disturb nearby noise sensitive land uses. Therefore, operational impacts would not be significant. Construction of the proposed water pipeline would not involve pile driving or other unusual construction practices which would result in higher noise levels. Increased truck traffic along area roadways would generate noise during construction. As analyzed in the PVSP Second Partially Recirculated Revised Draft EIR dated March 2007, construction activities would be temporary and generally occur during normal daytime working hours. However, should construction be undertaken during nighttime hours, construction noise could result in annoyance or sleep disruption for nearby residents, or if equipment is not properly muffled or maintained, the noise levels could affect nearby residents. This would be a significant effect. However, the infrastructure project would comply with the Placer County Noise Element standards and the Placer County Noise Ordinance which would reduce the effect to **less than significant**.

Indirect Effects on Public Services

The USACE has determined that the pipeline project would result in significant effects related to public services if it would interfere with emergency response for police or fire protection services.

Construction activities, such as additional truck traffic, could affect emergency response times for police and fire protection. However, construction would be temporary and the project would be subject to standard County and state traffic control and access procedures. The effect on public services from the water pipeline infrastructure project would be **less than significant**.

Indirect Effects on Transportation and Traffic

The USACE has determined that the pipeline project would result in significant effects related to transportation and traffic if the traffic added by it resulted in the exceedance of significance thresholds established by the City of Roseville and Placer County for facilities within their jurisdiction.

The construction and operation of off-site water pipeline infrastructure by the PCWA would result in **less** than significant effects to transportation and traffic. As analyzed in the PVSP Second Partially Recirculated Revised Draft EIR dated March 2007, construction activities would increase truck traffic on roads in the area. However, construction would be temporary and the project would be subject to standard County and state traffic control and access procedures. Once installed underground, the pipelines would not affect traffic. Therefore, the effects on transportation and traffic from the water pipeline project would be **less than significant**.

Indirect Effects on Utilities

The USACE has determined that the pipeline project would have a significant effect on the human environment if it would interfere with the provision of utility services to the project area.

The construction and operation of off-site water pipeline infrastructure by the PCWA would result in **less than significant** effects to utilities. Construction activities associated with off-site water pipeline such as additional truck traffic could interfere with solid waste collection. However, construction would be temporary and the project would be subject to standard County and state traffic control and access procedures. No other effects would result from the construction and operation of the pipeline. The effect on utilities from the water pipeline project would be **less than significant**.